IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Norfolk Division

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VIR2US, INC., Plaintiff and Counterclaim Defendant,	)	CIVIL ACTION NO. 2:15cv00162
v.	)	
INVINCEA, INC. and INVINCEA LABS, LLC, Defendants and Counterclaim Plaintiffs.	)	

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TRANSCRIPT OF PROCEEDINGS

Norfolk, Virginia
February 1, 2016

BEFORE: THE HONORABLE HENRY COKE MORGAN, JR.,
United States District Judge

APPEARANCES:

BUNSOW, DEMORY, SMITH & ALLISON LLP
By: Henry C. Bunsow
Brian A. E. Smith
Cliff Win, Jr.
and
KAUFMAN & CANOLES, P.C.
By: Stephen E. Noona
Counsel for the Plaintiff

COOLEY LLP
By: Nathan K. Cummings
Scott A. Cole
and
MCGUIREWOODS LLP
By: Robert W. McFarland
Counsel for the Defendants

(The hearing commenced at 11:04 a.m.)

THE CLERK: Civil Action No. 2:15cv162, Plaintiff Vir2usic v. Defendants Invincea, Inc. and Invincea Labs, LLC.

For the plaintiff, Mr. Noona, Mr. Smith, Mr. Win, and Mr. Bunsow, are you ready to proceed?

MR. NOONA: We are.

THE CLERK: Counsel for the defendants, Mr. Cummings, Mr. McFarland, Mr. Cole, are you ready to proceed?

MR. MCFARLAND: Good morning, Your Honor. The defendants are ready.

THE COURT: All right. First of all, I'd like to have a brief tutorial on the plaintiff's two patents. My shorthand interpretation of the purpose of the '541 patent is to protect the computer from a virus or hacking, where it's described as a malicious act. And, as I understand it, the way they try to do that is if they suspect that malicious activity is afoot they move the data storage from Storage One to Storage Two until they can satisfy themselves that they've dealt with that problem, and then they move it back to Storage One and erase Storage Two. Is that correct?

MR. BUNSOW: Yes, Your Honor, that is correct. That's the general import of both of the patents, is to basically have secured containers that contain the malware or the virus. They prevent the malware or the virus from

transitioning into the rest of the system, be it the network or the computer. If it is confirmed that there is malware in the secured container, then the secured container is basically destroyed, it's erased, and then a new container will be created for further processing.

THE COURT: Well, the second patent also talks about repairing the operation of the computer if it's been infected, let's say, by a virus, which is slightly different.

MR. BUNSOW: Slightly different but the same idea, Your Honor.

If the virus is contained, that portion of the data or the application might be removed, and in order for the processing to be continued it's replaced in its pristine form so the processing can continue and the system can complete its purposes.

THE COURT: Okay. Well, if there's an indication of malicious activity, does the patent -- or the first patent, let's say -- transfer the data to Stage Two, where they eliminate the problem, or do they transfer it to Stage Two and eliminate the pathway to the data?

MR. BUNSOW: Both.

THE COURT: They do both.

MR. BUNSOW: Both. The infected segments will be isolated from the rest of the system. And this is an important aspect of it. The whole point is not to allow the

virus or the malware to transition throughout the system. Before -- and when I go through the tutorial we have slides that illustrate this. Before there was no isolation, so if the virus came into the system, oftentimes it was configured so that it would infect the entire system, including the operating system, all the way to what's called the kernel of the computer, the basic heart of the computer.

That was a big problem, because it could destroy the whole computer system. It could destroy all the data in a computer system. It could take your address book, for example, and send that virus to everybody you know, which has happened to me; a very embarrassing situation.

And the point of the invention is not to allow that to happen, to encapsulate the portion that is at risk. And if it turns out that it is at risk, that portion is destroyed, and then it's renewed in its pristine fashion, thereby destroying the virus and preventing the types of things that I've described that will happen if the virus is allowed to transition throughout the system.

THE COURT: Okay.

MR. BUNSOW: Your Honor, I have a set of slides, if I could pass those up.

THE COURT: Okay.

MR. BUNSOW: And I have one for the law clerk as well.

THE COURT: All right. You have one for the clerk, one for me, and one for the law clerk?

MR. BUNSOW: Yes, Your Honor.

THE COURT: All right.

MR. BUNSOW: So these slides will be up on the screen. I'm a little bit old school. I find working from paper sometimes more effective, so take your choice.

THE COURT: Well, I'm from an older school than you are, so --

MR. BUNSOW: Okay.

THE COURT: -- I understand that.

MR. BUNSOW: Your Honor, my name is Henry Bunsow. I'm here from Bunsow, Demory, Smith & Allison. We represent the plaintiff Vir2us in this case.

Vir2us is an operating company. They make and sell software and hardware products throughout the United States. They've been in business for almost 25 years now. They began working on computer security products in the 1990s. They realized that the traditional approaches to computer security were not adequate, and they came up with the inventions that are reflected in the two patents in this case. The first patent was filed in 2002, the second one in 2004.

If you turn to slide 2, what's shown here is the traditional computer system. This is the traditional computer system that's used today, and basically it shows an

integrated system that has a single data storage connected and accessible at all times, and all the applications access all portions of the computer system so that the storage is always available to the applications.

Now, other companies, beginning in about the 1980s, realized that there was a problem, because, if you turn to the next slide, you see that there is no isolation between the applications. Basically, whatever the computer system is doing, the application can use data from anywhere in the system. So if you have multiple hard drives or a single hard drive, for example, the applications can access all of that information at will.

If you turn to slide 4, this is an illustration of the problem that computer systems began having in about the early 1980s when hackers began putting viruses out, particularly on the Internet. And what happens in the computer system is that a virus will come in through one or more applications. Let's say that you're researching something through the browser and you just happen to hit on a Web site that has a virus. That virus will come down from the Internet, it will come in through, as we show on slide 4, application number one, and once that virus gets into the computer system it has the ability to replicate and to infect all the other applications, to go through the user data, in the worst case, to get into the operating system and actually

into what's called the BIOS of the computer. It can actually shut it down.

There are thousands and thousands of these viruses out there. Every time you hook into the Internet you run the risk of that. That problem is discussed in the patents. If you look at slide 5, we have some examples from the patent of where the inventors have identified this problem; that there is currently, before these inventions, no way to prevent these infections from transitioning throughout the whole computer system.

So what did the industry do? If you look at slide 6, the industry came out with what's called antivirus software. There's a company called McAfee, which you've probably heard of, which is the best-known company for antivirus software. And I used to subscribe to McAfee, and the problem with McAfee is about every other day they had an update, and about every other day you had to log onto their system to get a new update of the new viruses that they had found the night before.

Because what they used was an indication approach. They called it a signature approach, but it was an identification approach. It was a reactive approach, not a proactive approach. And the reactive approach was when they identified a virus out on the Internet somewhere -- and they were very diligent about looking for these. When they

identified one, then they would send an update to all of their millions of users saying, "We now have a new virus, X-Y-Z," whatever, "and we're going to upgrade your software so that whenever you're downloading files from the Internet we can scan those files to see if this virus is in there. If this virus is in there, we block that file so you don't get it." The problem is if they didn't spot that soon enough I could get infected, and did many times, and so did everybody else. So it's a reactive approach, and it only worked once they identified the problem.

So, as we point out on slide 7, the virus had to be known, there had to be something for them to look at, and there was no protection from modified viruses, new viruses, and there are literally thousands of new viruses almost daily; a tough problem.

On slide 8 we have a time line that shows the effect of antivirus software. Basically, there is a time period when there is no protection, the time period during which the new virus is out there, when McAfee hasn't identified it yet, or maybe you weren't as diligent as you should have been in logging on and updating your virus protection. So during that period of time you're vulnerable, and that's when many, many problems occurred.

This was a problem that the inventors recognized, and we have a short video -- this is our Director of

Marketing -- that describes what was going on.

(A video was played for the Court.)

MR. BUNSOW: So, basically, he's confirming what I was telling you. And if you look at slide 10 you'll see an example basically illustrating thousands of viruses that are coming in every day, and the problem is it's impossible for the antivirus companies to keep up with them all.

So what's the answer? The answer is illustrated in the '541 and the '598 patent. And if you look at page 12 of our slide presentation I think the title says it all: "Computer system architecture and method providing operating system independent virus, hacker, and cyber-terror-immune processing environments."

To break that down, what we're talking about is independent processing environments that prevent the ability of viruses, hackers, and cyber terrors from getting into the rest of the system. That's exactly what you asked about when we started the discussion this morning.

So if you look at slide 14, we show an example from Figure 2 of the patent, where the architecture provides isolation of data and applications. There are multiple computing environments, not just one, and there are multiple data stores, not just one, and this is done using the Vir2us software and other software that operate in accordance with the invention.

If you turn to slide 15, there is a data store switch that controls access to the data stores. And by "data stores" we're really talking about the rest of the computers. When it's coupled it allows access. When it's decoupled it does not allow access. When it's decoupled the viruses cannot get to the rest of the system. So this data store switch system -- and the switch can be either mechanical or electrical, and today they're primarily written in the software -- isolates the data applications.

That's illustrated on slide 16, looking at --

THE COURT: Let me ask you a question here.

MR. BUNSOW: Yes, sir.

THE COURT: So if we're talking about a virus or a hacker the principle would be the same; if they get into one application, because of the way it's programmed it recognizes that it's malicious activity, and it decouples that application from the others. So that application is infected, but it doesn't spread.

MR. BUNSOW: Correct.

THE COURT: And then you move that data to Stage Two and erase the malicious activity, and then you send it back.

MR. BUNSOW: Correct. That's correct, Your Honor.

THE COURT: And, presumably, having recognized it, you can prevent at least that particular virus or that particular hacker from getting back into the system.

MR. BUNSOW: Well, the key is you don't have to do that. You don't have to keep a record of the particular viruses, like the antivirus software requires you to do. Obviously, you can. You don't have to because of the isolating features. It's not going to get to the rest of the system, ever. That's the key to the invention.

THE COURT: Not the data that you cleansed and sent back.

MR. BUNSOW: That's right.

THE COURT: But it's already acquired the ability to recognize the virus, so there's no other step involved at that point.

MR. BUNSOW: That's right, and any infected portions have been removed from the system.

THE COURT: Okay.

MR. BUNSOW: So that's what I mean when I say it's a proactive approach, not a reactive approach, all right? It anticipates that there will be infections. We know there will be infections, but it isolates portions of the system that are vulnerable to infection so that when that happens it doesn't spread.

THE COURT: So if a hacker gets in, he only gets into one application.

MR. BUNSOW: That's right. That's right.

So that's shown on slide 16 in the vernacular of the

patent, where they identify the different computing environments and show examples of how that works. That's also covered in our expert's opening declaration, Exhibit B of that declaration.

So there are two ways, on slide 17, to implement the invention. You can do it physically, by having segregated physical memories, or you can do it electronically by creating different environments within the same system. The switch that connects between the various aspects of the system, the data stores, and the applications, can either be a mechanical switch -- some of them are on the actual side of the computer box; there's an example of that in the patent -- or it --

THE COURT: You mean a switch that you put your finger on and physically switch it like you would --

MR. BUNSOW: Yes, sir, that's one example.

Or the more common example today, of course, a software switch that's in the system, and that can do that either manually or it can do it automatically. Those are all described and covered by the patent.

If you look at slide 18, we're illustrating from the specification of the patent at column 17 what the different logical storages might look like. There's a physical storage, which would be your large hard drive on your computer, and within that large hard drive the software has

the capability of identifying discrete portions that are individual physical storages. These are exactly the same as if they were separate pieces, from an electronic standpoint. They cannot communicate with each other, and that's important to the invention.

On slide 19 we show separate physical storages that could be used, and these would be different storage mediums. The patents disclose several different ways of implementing it, and this is another way of implementing it.

On slide 20 we point to the portions in the specification where the patent describes that the isolation may be implemented either with software or with hardware. That's what I was describing previously. Most of the systems today have mechanical hard drives, and they actually have memory solid state hard drives; that most of the systems today are implemented using the software implementation, rather than actual hardware switches.

THE COURT: All right.

MR. BUNSOW: So what is --

THE COURT: How much of this were you intending to go through?

MR. BUNSOW: I think I've got a few more examples, and then I'll be done.

THE COURT: Okay.

MR. BUNSOW: All right?

So I think the one that I think is most illustrative -- if you'll turn to slide 22, we show an example from Figure 12. We've annotated Figure 12 to show the virus and how it's contained, and you can see that, using the teachings of the patent, the virus is contained and isolated and other storage is not affected. And we have some more examples of how that's accomplished in accordance with the patent in the next few examples.

And then I have a real-world example of the invention being implemented, and that's on slide 29. This is literature from Invincea, the defendant in this case, and it shows the secure virtual container, in accordance with the teaching of the patent. We have a brief video on this.

(A video was played for the Court.)

MR. BUNSOW: So that's exactly what I was describing; the Invincea system creates a secure container that limits access to the host system, and all of the operations is contained inside this secure container.

And the next slide shows what happens in the Invincea system when an infection occurs.

(A video was played for the Court.)

MR. BUNSOW: So Your Honor can see once that threat is identified it's secured in the secure container, and then the container is destroyed. Then the application operating environment is restored to its pure form, and the rest of the

computer system is not impacted. And that is without the need to store thousands and thousands of signatures for viruses. It happens without the threat that a new virus will come in that they haven't seen before, and it works in all examples.

So, to summarize the Vir2us patents, Your Honor, antivirus software is no longer effective. We've seen that in our own homes. I certainly have. The Vir2us inventions take a fundamentally different approach. They use a containerized application approach, they protect against unknown viruses, and they prevent the viruses from spreading to the rest of the system.

That's what these patents are about, and that's where the industry is going. That's where Invincea has put its products. Invincea also has a patent, by the way. The only problem is it's eight years later than our patent.

And, with that --

THE COURT: When I was studying about sending this off somewhere, it made me think of what people call "cloud computing." I mean, this is like sending something off to the cloud, except instead of sending it off there to be saved it's sent off to be destroyed.

Is it the same theory or what?

MR. BUNSOW: It's a little different, Your Honor.

The cloud is simply a large storage area. This is

actually an identified area within your own operating system, so this is not an attempt to increase storage capacity or anything of that nature.

You're correct in the sense that the cloud is isolated from your system. That's true, but this is for a different purpose. This is not -- the cloud is to enhance storage and retrieval. This is to make sure that you have a pristine operating environment for your applications and to replace that pristine operating environment if it becomes infected. So a little bit different.

THE COURT: Okay.

MR. BUNSOW: Thank you, Your Honor.

THE COURT: Okay. Well, I think the next step is the defendant is challenging certain words and phrases in these two patents, so I think it's their turn to make their objections and their proposed definitions.

And, you know, you said you wanted four hours. I don't know if you have planes to catch, but it doesn't make any difference to me how long you take. We'll just keep going until we get the job done.

MR. BUNSOW: Let me just say, Your Honor, that time estimate was pretty early on in the process. I think we've been able to make some progress since then. I seriously doubt it will take that long.

THE COURT: Well, the last time I had this many it

took longer than that, so if you can do it shorter, all the better.

MR. BUNSOW: Thank you, Your Honor.

MR. CUMMINGS: Good morning, Your Honor. I'm Nathan Cummings. I'm from the Cooley LLC firm. Our office is in Reston, Virginia. We represent Invincea, Inc., which is based in Fairfax, and Invincea Labs, which is based in Arlington.

And, while I agree with much of what Mr. Bunsow explained about the technology, there are a few details that I'd like to go over with Your Honor that are important for the issues that the parties will be discussing in the construction.

We also have some slides. We have four copies of the slides for the Court and a couple for opposing counsel. So we went through in our slides a lot of the information that Mr. Bunsow did, so I won't go through all of that, but I just want to point out a couple of the issues.

If you turn to slide 5, Your Honor, what slide 5 does is compare the prior art computer system to --

THE COURT: Slide 5? How are these numbered?

MR. CUMMINGS: There's a number down in the lower right- or left-hand corner.

THE COURT: Okay, I see it.

MR. CUMMINGS: So in the prior art system you'll see

on the diagram from the patent on the left side there's one data store, there's one processing unit, there's peripherals, and this shows the computer screen and the computer box. The patent explains this is a laptop or a desktop computer. This is a computer that you have in your office.

Figure 2 is their invention, but you'll see -- and it zooms in a little bit on the next two slides, so in slide 7 it now has multiple processing units, this 1508. It's got multiple processing environments, each of which is isolated from the rest, and it has multiple data stores, like each of these are hard drives, and then it has a switch that will allow a computing environment to be connected to a particular data store.

Now, when the user wants to edit a file, as Mr. Bunsow said, you don't want to corrupt your main hard drive, so it will copy that file from, say, Data Store No. 1 into Data Store No. 2, and then it will do the processing on that data store so that if it gets corrupted everything is okay with 1, and if No. 2 gets corrupted it can be repaired and fixed.

So the different data stores are actual physical devices so that everything that's stored on the first one won't get corrupted and you can fix the things that are on Data Store 2.

THE COURT: You say they're physical structures?

MR. CUMMINGS: Yes. And, in fact, let's jump to --

THE COURT: That's what you seem to be arguing about, is whether they're physical structures or programs.

MR. CUMMINGS: On slide 10, this illustrates this idea of physical and a logical drive. So the '541 patent explains that the storage element can be partitioned on a single physical hard drive. So what this illustration shows is one hard drive that gets partitioned into three different data stores. So you've got your C drive, your E drive, or your Z drive. They're logically different drives. They're logically the three data stores that are shown, but they're all still on a physical device.

THE COURT: Well, how do they create the three different drives? That must be done by software.

MR. CUMMINGS: Well, the software in the system logically divides these and recognizes this portion of this physical hard drive is the C data store, and it recognizes that this portion of the physical hard drive is E, and so forth. Each one of them is still a physical device or part of a physical device, but the system views it as being separate devices when, in reality, it's one device.

The next slide shows something that's slightly different. The patent also explains that the separate logical storage elements can be a combination of physical devices. So here it shows you have four separate hard

drives, and each one of those separate hard drives is partitioned, and they combine to make the three separate data stores. So part of the first one, part of the second one, part of the third one, and part of the fourth one is the C drive, and so forth.

And, so, this is just a way to make the use of physical memory devices more flexible to the system. You can have one device that's divided into multiple pieces, or you can have multiple devices that are divided into multiple pieces, but it's still part of physical drives, are these separate data stores.

And then the next slide, slide 12, shows yet another example that the patent explains. You can have multiple hard drives that are combined logically so that they all look like one data store. So in this example there are three separate hard drives that are logically combined to be this Data Store No. 2, and so the system views it as a data store, but fundamentally they're still physical devices, physical drives.

And, so, you can mix and match these as you need, if you need one data store to be part of another drive or combinations of others. And, in fact, on slide 13 it doesn't even need to be a hard drive. It can be a hard drive, but then the patent also explains that it could be memory chips or a CD drive, or a DVD drive, or -- you know, there's a lot

of different types of memory devices that are used, but fundamentally memory is always stored on a physical device, even if it can be divided up logically like this.

And then, Scott, if we can go to slide 9.

THE COURT: Slide 9?

MR. CUMMINGS: Slide 9, yes.

So this is an illustration from the '598 patent, and again it shows the central processer, the CPU, can be connected to multiple different data stores through this data store switch.

So, for example, the computer can boot up on Data Store A and operate on Data Store A, but a program will run periodically to determine if that data store is healthy or not. And if it determines that it's corrupted or there's a problem with it, then the system, the switch, disconnects Data Store A and connects it to Data Store B so that the system can continue to run. And the user can then either repair Data Store A or take it out and put a new one in or replace the files so that it gets fixed.

And then the last point that I wanted to emphasize, Your Honor, was back on slide 7. This was the example that Your Honor talked about if you open a file and you want to make sure that that file doesn't corrupt other files. So what the patent explains is -- say I want to open a Word document or an e-mail. It will copy it from Data Store 1 to

Data Store 2. So it will connect the computing environment to Data Store 1 and to Data Store 2, copy the file into Data Store 2, and then it will disconnect Data Store 1 so that it can't access, and if there's a virus it can't get into Data Store 1.

And then the user edits the Word file or reads the e-mail in Data Store 2, and if there's a problem with it then they can disconnect that data store and either repair it or take it out, and the original file in Data Store 1 has not been affected.

Now, there's a pretty significant difference between the way that Invincea's patent approaches this and the way that Vir2us's patent does it. So, Your Honor, if you'll turn to slide 16, this illustrates the Invincea invention. And I know that this diagram is a little bit busy, so what I want to do is to step through each piece to show how the system operates.

So on slide 17 this just shows the computer hardware. This is when it's sitting there on your desk turned off. It's not been booted up, there's no operating system.

On slide 18, now in orange, this shows the operating system after the computer is booted. This shows the operating system. And this can be any operating system; your Windows, your Mac OS, Linux, UNIX, and the like. It's called

a host operating system because it hosts all of the functions on the computer. And the kernel is just the main, basic operating system functions. You can have a lot of additional functions with an operating system, but the kernel is the main one.

Now, on slide 19 what this shows is that the operating system can create a virtual computer. And what this looks like to a program is that it has its own computer, and it has everything that a computer would have, but, in reality, this is running on top of the operating system. The operating system is just creating this virtual environment that something could run in, and it has a guest operating system, a guest kernel, that could be some or all of the host kernel. But the point is that this just looks like a regular computer, but it's being controlled by the host operating system.

And so on slide 20, when the user wants to run an application then the system creates these virtual browsing environments -- and it shows three of them up here in the virtual computer, VB-1 through -3. And if the user runs an application that may allow him to browse to harmful files, browse to e-mails with virus attachments or, you know, Word documents can have viruses. So anytime that you can open an application the system creates one of these virtual browsing environments, and it monitors what the program is doing.

So Word has normal and expected operations, and the system understands what Word is like when it's operating normally. But it watches, and if Word does something that appears to be --

THE COURT: Word? Where did that come from?

MR. CUMMINGS: Word is just one of the applications that you can run in one of these virtual browsing environments. It could be your Outlook program, it could be a Web browser. It's essentially any type of a program that may allow you to browse information and potentially run into some sort of an infected file.

And on 21, if the system detects that the program that's running in that virtual browsing environment is doing something abnormal and it's potentially malicious, then the system just kills that virtual browsing environment. And you can restart it and start Word over again, but it's been isolated from the rest of the system.

So it's different from using a physical hard drive and connecting and disconnecting from physical memory and isolating in physical memory what Invincea -- they call theirs the sandbox. You can get into the sandbox and play around and experiment, and if something goes wrong you delete that program, that virtual computer, and start a new one, and everything is clean and pristine again.

So do you have any questions, Your Honor, on the

background?

THE COURT: Not at this point.

MR. CUMMINGS: Okay. So let's jump to the first term that we'd like to address, which is the "processing logic device" and "microprocessor." That starts on slide 23.

THE COURT: "Processing logic device." Somehow I have these in a different order. The first disputed term I have is "dynamically configurable."

I don't know why I have them in the order I do.

MR. CUMMINGS: Well, if there's a particular order that Your Honor would like us to address these in, we're happy to do that. We think that there's some concepts that will make later discussions a little easier, so --

THE COURT: Well, you put them in the order you think they ought to be in.

MR. CUMMINGS: So in our slides --

THE COURT: The first one is "processing logic device"?

MR. CUMMINGS: -- is "processing logic device" and "microprocessor." I'm going to deal with them together because they're related.

I'm going to start on slide 23, and these slides just show --

MR. NOONA: Your Honor, if it's helpful, the joint claim construction chart has the order. It's Exhibit 2.

THE COURT: Yeah. Well, if you think that there's a particular order that will make it more understandable, you can put them in whatever order you want.

MR. CUMMINGS: Okay. And I think we generally follow what was outlined in the joint statement, but we may go out of order just a little bit. But there's method to our madness. We think that it will make later concepts a little clearer.

THE COURT: Okay.

MR. CUMMINGS: So slides 23 and 24 just show the claim language and some of the terms.

Slide 25 --

THE COURT: Wait a minute. Slide 24 and 25 is --

MR. CUMMINGS: 25. This is for the Court's convenience, to be able to see the parties' competing constructions that we laid out in the briefing.

THE COURT: Right.

MR. CUMMINGS: So the core dispute on these, Your Honor, is shown on slide 26. The core dispute here is can a processing logic device or a microprocessor be software.

Well, that was an issue that the parties ran into while we were meeting and conferring about the possibility of dropping a number of claims, and Vir2us took the position that a microprocessor or processing logic device -- there's no reason why it couldn't be software. Well, that's

inconsistent with the plain meaning, and there's no support for that, so we believe that the Court needs to construe these terms so that the jury understands that a processing logic device and a microprocessor are not software.

Now, in their responsive brief, as shown on slide 27, Vir2us is now conceding that a processing logic device is circuitry. We think that they mean that it's hardware circuitry, but their definition isn't clear for that. But we think the jury needs to clearly understand that a processing logic device and a microprocessor are hardware, they're not software.

Now, sometimes a plain meaning is not enough. As the *02 Micro* case discusses -- and we've got a couple other cases mentioned here -- even if the parties agree on a construction, if they disagree on the scope of a term, on the technical scope, then the Court needs to address it. And I think that's one of the questions that we have here, is that the parties dispute whether these terms can cover software or hardware only.

Now, just to address some of Vir2us's arguments in their reply brief, they argue that our definitions are overcomplicated, but, in reality, our definition of "hardware circuitry" is simpler than their definition of "computer processing circuitry." Their definition is circular. To say a processing logic device is computer processing circuitry,

that doesn't seem to be helpful.

And Vir2us's definition also fails to explain that "processing" means executing electronic instructions, as we show on slide 30.

THE COURT: Slide 30.

(There was a pause in the proceedings.)

MR. BUNSOW: So for "processing logic device," Invincea's is the proposed construction that will really help the jury to understand that this is hardware circuitry that executes instructions.

Now, for "microprocessor" the main issue with Vir2us's position is they don't have a definition. They want the jury to understand what a microprocessor is just from the understanding of a layperson, but that doesn't help the jury to understand what the difference between a processing logic device in some claims -- how that's different than a microprocessor in other claims. And our definition of "microprocessor" comes directly from technical dictionaries. It's the standard way that "microprocessor" is defined.

So we ask the Court to construe both of these terms to make it clear for the jury that these are physical structures, that these are physical devices, not software, and Invincea's proposed constructions are consistent with industry usage.

THE COURT: Okay.

MR. CUMMINGS: Any questions, Your Honor?

THE COURT: Well, let me hear from the other side.

MR. WIN: Your Honor, there is no fundamental dispute as to these two terms. I think it's pretty obvious we've made it clear to Invincea that for these two terms we are accusing hardware.

THE COURT: You are what?

MR. WIN: We are accusing the hardware on the laptops upon which Invincea runs with respect to these two terms. That is reflected in our interrogatory responses, that is reflected in our infringement contentions, and it's also reflected in the claim construction briefing.

We do not dispute that processing logic devices or microprocessors are anything other than hardware in this particular case in these accused products, so we believe that there is no fundamental dispute. When there's no fundamental dispute, and when something like a microprocessor is readily understood -- everyone knows what a microprocessor is. Everyone knows that a microprocessor is that thing in your laptop when -- under those circumstances, the Federal Circuit has ruled that a court should not and need not construe those types of terms.

THE COURT: All right. So you're not contending that a processing logic device could either be hardware or software. You admit that it's hardware.

MR. WIN: That's right, we've accused the hardware.

THE COURT: And the same for "microprocessor."

MR. WIN: Correct.

THE COURT: Well, if that's the case, what is the problem with the defendant's construction which says, "hardware circuitry capable of executing electronic instructions"?

MR. WIN: Your Honor, the problem with their construction is it has extraneous and needless language, when there's no fundamental dispute that it's hardware. And that's why we offer, if these terms must be construed -- which we don't believe they need to be, but if they must be, we offer a simple construction that's true to the patent, simply computer processing circuitry. There's no need to rewrite or redefine simple lay terms like "microprocessor."

THE COURT: Well, that might be true as to "microprocessor," but "processing logic device" is a little different.

MR. WIN: Well, Your Honor, we believe that a term like "processing logic device," in the context of the invention and the context of the claims, we're talking about a computer patent, computer software patent, that runs on computers, and "processing logic device" -- even the word "processing" is pretty obvious to a layperson that it's a device that's for processing computer instructions.

THE COURT: Well, if you say "computer processing circuitry," that's consistent with your saying that it is hardware and not software.

MR. WIN: Yes, sir.

THE COURT: Well, okay.

MR. WIN: Your Honor, I think our main point is that these terms should just be given their plain and ordinary meaning because they're readily understood and readily apparent.

THE COURT: I don't think "processing logic device" is readily understood. Once you get past the issue of whether it's hardware or software, it seems to me that the defendant's proposed construction of "processing logic device" is accurate.

I agree with you that I don't think "microprocessor" requires a definition.

MR. WIN: Thank you, Your Honor.

THE COURT: So I think as to "processing logic device" the Court will adopt the defendant's proposed construction.

And with respect to "microprocessor," which I think is a term generally understood as to its meaning, it doesn't require a definition.

MR. WIN: Thank you, Your Honor.

THE COURT: So we'll just leave it as

"microprocessor."

MR. WIN: Yes, sir.

THE COURT: All right.

MR. CUMMINGS: All right. So the next term -- and it's another cluster of terms. It's the "data store" terms, and this starts on slide 34.

The parties agree -- even though these "data store," "storage," "data storage" terms are slightly different, the parties agree that they should all have the same construction.

So slide 34 just shows some of the claims that use this different verbiage from the '541 and the '598 patent.

Slide 35, just for the Court's convenience, shows the comparison of the parties' proposed constructions, as noted in the briefing.

So on slide 36, this shows the core disputes between the parties. So, first of all, are data storages physical devices, or can they be mere software? And then, second of all, are data storages separate from each other, or can they overlap or be subsumed within each other?

On slide 37, this is the intrinsic support that shows that the data storage devices are physical. Storage is implemented as a single physical device, as the diagram that I showed Your Honor earlier, or two or more physical devices, or portions of one or more physical devices. So the fact

that the system is flexible to be able to use one or part or portions of one or more devices, fundamentally they're still physical devices, and that's a key dispute between the parties.

Because remember, Your Honor, Invincea doesn't sell any hardware whatsoever. Invincea only sells software. And, so, the physicality of some of these terms is critical. And Mr. Win referred to their infringement contentions, but their infringement contentions say Invincea provides the processing logic device, Invincea provides the microprocessor, Invincea provides the data storages. But Invincea doesn't provide any hardware. We only sell software, and it can run on any computer, not the specialized computers with the multiple different computing environments and the multiple different data stores that the plaintiff's patents cover. So the physicality of these is important.

Slide 38: Here's additional intrinsic evidence that the data store can be a combination of storage devices. It doesn't say "combination of software modules" or "software programs," it says "storage devices," and it lists specific ones. You've got magnetic hard drives and optical storage media, which is CDs and DVDs and other types. RAM, ROM, EEPROM, CMOS, those are the computer chips that everybody thinks of when you think of a computer chip.

These are all physical, and there's nothing in here

that explains how data stores are software. And that's important, because fundamentally software is always stored on a physical device. You can't store software in software. Software is stored on some type of a memory in a computer.

So this is the comparison against the prior art, on slide 38 -- 39. I apologize. The prior art had one data store --

THE COURT: 39?

MR. CUMMINGS: 39, yes, Your Honor.

The prior art had one data store, and, you know, it's physical. This is a physical computer. It's showing the screen and the case, and the peripheral is the hard drive and -- or is the keyboard or the mouse, and then the invention that's shown in Figure 2 on the right shows separate data stores. And, again, these are separate devices, so this is getting to the second issue about whether data stores have to be separate or can they overlap or be subsumed within each other. The diagram on Figure 2 shows that these data stores are separate.

Now, Vir2us makes some arguments that the data storage can be hardware or software or a combination, and on slide 40 we've got their citation, '598 patent, and they cite three lines from column 64. But the larger quotation there that they didn't quote in their briefing shows that these are still hardware devices. "Herein, any form of data storage

device can be used... data storage devices can be mixed and matched as desired."

The hardware devices might include software in order to operate. I don't know if Your Honor has ever opened up a hard drive, but you can see circuitry in there. And hard drives will frequently have software inside there to help the operation of the hard drive, but it's not the data store, it's not the data that's being stored on the hard drive. So to suggest that a data store could have software to help it operate is very different than saying that a data store can be purely software.

Slide 41: This is just another quotation that shows that ultimately software has to reside on a physical device, as shown in this passage.

And slides 42 and 43 get back to the idea of logical versus physical. Vir2us argues that the data storage can be logical, but it doesn't need to be physical. And, again, they cite three lines from column 17 of the '541 patent, but that's actually part of a much larger discussion that we've laid out for Your Honor on the next page, on slide 43, that shows in reality the logical data stores are portions of physical memory devices.

So on slide 43 what we have highlighted in yellow are the passages that show that the data stores are physical devices. And then what we have highlighted in blue is

showing that the data stores can be logical, but they're nonetheless physical devices.

So saying that "logical" equals "software" is really not correct, because the logical drives are still fundamentally portions of part of one or more physical devices.

THE COURT: Well, a physical device in itself has no logic until you add software. Isn't that true?

MR. CUMMINGS: Well, take, for example, memory chips --

THE COURT: I mean, if you just look at the piece of -- at that computer, there's nothing logical about the computer until it has an operating program --

MR. CUMMINGS: Well, there are aspects of ---

THE COURT: -- or a hard drive or --

MR. CUMMINGS: There are aspects of the system that the software will use in order to operate the computer, operate the software, but --

THE COURT: Well, I mean, like in the example you showed, it was a piece of hardware with three different memories; C -- whatever it was. I can't remember the letters.

MR. CUMMINGS: Yeah.

THE COURT: But it was divided into three parts. Well, that's done by software.

MR. CUMMINGS: Or by hardware configuration that tells the computer to recognize this portion of the hard drive as a C drive.

THE COURT: Well, it seems to me that logic does suggest software, because hardware by itself is not logical and cannot operate logically until you introduce software.

MR. CUMMINGS: If I understand Your Honor's question, I think it's correct that you can use software to define the logical boundaries, but fundamentally logical drive C is still only on a physical device.

So the data stores that they illustrate in Figure 2 of their patent -- Data Store 1 may be a portion of this hard drive, and it may be software that tells the system, this is where our boundaries are drawn, but fundamentally the drive C is still a portion of a physical device. And that's why our construction says that it's a portion or portions of a physical device, because it could be a logical portion of a physical drive that's separate from another logical portion of a physical drive, but they're still physical and they're still separate.

Does that answer your question, Your Honor?

THE COURT: Well, let me hear what they have to say about it.

MR. CUMMINGS: And then my last point about separate is that Vir2us argues that we don't need to have this

language in the definition that they're separate from each other because the claim language refers to a first storage and a second storage. But that example doesn't make any sense, and on slide 44, I've got three examples that show that identifying three separate areas doesn't mean that they're separate.

So, if we define the first area as being the boundaries of the Commonwealth and a second area as the boundaries of Norfolk and a third area as the boundaries of the James River, well, some of those areas overlap, some of them are entirely within each other, and some of them may have partial overlap.

So merely saying that there's a first data store in the claim and a second data store in the claim won't clarify for the jury that these are separate data stores. And, so, that's why, for the technical scope of this claim to be clear for the jury, it needs to be clear that Data Store 1 is separate from Data Store 2, which is separate from Data Store 3, which on a technical level makes complete sense. Because, as Mr. Bunsow was explaining, if you get a virus in one of the data stores, if they overlap, then it's going to infect the other data stores, so you keep the data stores separate.

And that's a key aspect of their invention; keep them separate so if there's an infection in one it doesn't destroy one or the other. So, from a technical standpoint,

the "data store" terms need to have this idea of being separate.

THE COURT: Okay.

MR. WIN: Hello again, Your Honor.

First of all, Your Honor, I just wanted to point out that I think I agree with you, Your Honor, that hardware by itself is not logical. Software is what makes it logical.

And I also heard Your Honor say that there was an example where you may have a physical memory with three different partitions within it, and so each of those partitions are logical partitions, and each of those logical partitions is a data store, as described in the specification. And I'll go through portions of the patent which explain that.

Mr. Cummings repeatedly mentioned "logical portions," and that's exactly what we're talking about here, are logical portions, logical portions that are logically separate from each other, and each of those can be data stores. That's very different from physically different data stores, where you actually have a piece of memory in one hand and another piece of memory in the other hand. Those are two physically different data stores, which the patent certainly accounts for as well. There's various types of examples.

In another example, like Your Honor explained, like I said, was one physical memory with three different

partitions or three different data stores. The patent accounts for all types of examples.

Now, if I may go into the slides --

THE COURT: Well, I agree with that, but it does seem to me that they have to be separate.

MR. WIN: They do have to be separate. The question is can they be only physically separate, or can they be logically separate as well.

THE COURT: Well, what I had written down as a proposed definition is, quote, "separate areas of memory to store data," unquote.

MR. WIN: We would be fine with that, Your Honor.

MR. CUMMINGS: I guess the concern that we have with that, Your Honor, is that it runs the possibility of misleading the jury into misunderstanding that even though the data stores can be logically separate from each other, they're still on physical devices.

THE COURT: I don't accept that argument, Counsel. Of course they've got to be on physical devices, but it's a combination of a physical device plus the software. You don't have to have a separate piece of hardware for every separate area of memory. You can have multiple memory stores on one piece of physical hardware.

MR. CUMMINGS: That's correct, Your Honor.

THE COURT: Okay. Well, in order to have separate

areas of memory on one piece of physical hardware, you've got to have software to separate them.

MR. CUMMINGS: From the point of view of a software program that's out looking at a hard drive that's divided into three different pieces, the program has no idea is drive C a separate physical device from drive E, or are they all on the same device, or, as the one example that I showed, you can have three hard drives that are logically combined into one data store.

THE COURT: Well, you could have, and then you could have the software divide them.

I'm going to go with that definition, "separate areas of memory to store data."

MR. CUMMINGS: Okay. So I think we're going to move on to "data store switch."

THE COURT: To which?

MR. CUMMINGS: The "data store switch." And that will start on slide 48, and my colleague Mr. Cole will argue this term.

THE COURT: "Data storage switch." Okay.

MR. COLE: Good afternoon, Your Honor. My name is Scott Cole. I'm also with Cooley, as my colleague mentioned.

THE COURT: Well, we're now -- well, we haven't finished with the '541 patent and we're moving to the '598 patent. Shouldn't we do one patent at a time?

MR. COLE: If you have a strong preference for that, then that's fine. The reason that this follows the two previous discussions is because the data store switch is what connects the processing logic device, which is what we talked about first, and the data stores, which we --

THE COURT: Well, I agree with you there. It does logically follow, but I would say that the Court having adopted the definition it did to the previous term, that you're swimming upstream. Because at one place in your argument you use the term "data store switch device," but there's no word "device" in the term to be construed.

So I think that in computer language -- you know, computers have invented a whole new set of meanings for terms. I mean, I used to think of a switch as the one right behind you where you turn the switch, but I think in computer language "data store switch" or "data store switching" can be accomplished either through hardware or software.

MR. COLE: Well --

THE COURT: It doesn't require a separate piece of hardware.

In other words, we talked about the switch on the side of the computer, and you can flip that switch, but I imagine that's becoming a dinosaur. It's all done by the software.

MR. COLE: Certainly, Your Honor, I think that

there's a distinction here that needs to be drawn between the switch itself and the action of switching, which is what the switch accomplishes.

Now, switching can be done in software. We don't dispute that at all. But the switch that accomplishes that task has to be structural in nature, and that's reflected in the figures of the claim.

THE COURT: "Structural in nature." I don't understand what you mean by that.

MR. COLE: Sure. It has to be a physical device that implements that software, so the switch that holds the software --

THE COURT: Well, it would have to be a physical device that implements the software. It has to be software that implements the physical device. It works both ways.

MR. COLE: Well, the software is necessary to make the switch work --

THE COURT: Right.

MR. COLE: -- but the switch exists independently of the software. You can have a switch that's not programmed with any software on it. It won't work, but it will exist as a piece of hardware.

THE COURT: Well, yeah, that's right, it could be either one. That's the point, I think.

MR. COLE: You could also have a switch that

physically switches so it would exist and perform the function of switching without any sort of switching software.

If you'll take a look at slide number 50, this kind of illustrates the point that I'm getting at here. You'll see this dashed box that circles or that encompasses a number of components. There's a microcontroller there, there are a number of switches there, there's a power supply. Those are all components of a physical device, and that dashed box there is described by the patent as forming a data store switch.

THE COURT: Well, I understand that your point is that you want to define these terms as requiring some sort of physical device, and Mr. Cummings explained very candidly why he wants to do that, but I just don't think a switch is confined to a physical device. I think a switch can be a physical device or it can be software. And, actually, it requires both, unless you are talking about the switch on the side of a machine.

And maybe that is currently in use to some degree, but I suspect that it's going to be obsolete, because you're got to have somebody stand beside the computer to flip a switch. So it's going to be operated by the software.

MR. COLE: I agree, Your Honor, that the switching function will be achieved -- or can be achieved by software, but even the inventor draws a distinction between the switch

itself and the switching function that it accomplishes, and that's reflected in the slides here. I'm looking at slide 55.

Oh, I'm sorry, it was 53, I believe.

THE COURT: 50 -- what?

MR. COLE: 53 -- 54. I'll make up my mind this time. I promise.

Here it is. 55. I was right the first time.

So if you'll look at the last sentence in this quote on page 55, it says that the boot-store switch responds programatically to the CPU 60 and illustrates a software-controlled switch. So the mechanism or the action of switching is software-controlled, but there is a physical switch.

And, so, what we're saying is that --

THE COURT: No, it says it must occur on a physical device. Well, everything must occur on a physical device.

MR. COLE: And, so, we're trying to distinguish --

THE COURT: You don't have any hardware, so software can't operate in a vacuum. It's got to be part of a physical device. So I don't think that deals with the issue.

MR. COLE: Okay.

THE COURT: I think it's a combination of hardware and software, except in the instance where you have the switch. If that was the only thing they had, you had to go

up there and flip the switch in order to switch, then I would agree with you that it's purely a physical device.

MR. COLE: So, in that case, Your Honor, we would agree that that's fine, that that construction is fine, as long as it reflects that the switch is physical and software. But there is necessarily a physical component.

THE COURT: Well, I mean, any function requires hardware, but what causes the switching is the software. That's simply a function that the hardware is equipped to accomplish through the use of software.

So I don't think it's a physical device. Now, let's see. Did I write down a...

(There was a pause in the proceedings.)

THE COURT: I just think this is one of those terms that has a different meaning in computer language than it does before computers, B.C. So where does that leave us?

MR. COLE: Well, Invincea's preference would be to have a construction that reflects what Your Honor said; that it is a combination of hardware and software. But that is the key point that we wanted to emphasize in the construction.

THE COURT: Well, everything is a combination of hardware and software, every function is, but it's not a physical device, which is what your construction says.

MR. COLE: So, Your Honor --

THE COURT: I think the plaintiff's construction is software or hardware that controls access to a data store.

MR. COLE: That's right, Your Honor, they have it as software or hardware, implying that the software could operate independently of any hardware, and we just don't think that that's correct.

THE COURT: Well, neither one could do it by itself.

MR. COLE: That's true, Your Honor, except in the case of --

THE COURT: But that's true of every function we're talking about.

MR. COLE: We didn't have anything else to add to that, Your Honor, unless you have some questions.

THE COURT: All right.

MR. COLE: Thank you.

MR. SMITH: Your Honor, Brian Smith for Vir2us. We've split up some of the terms.

Your suggested definition for "data store switch," adopting our alternative construction, is fine with Vir2us, Your Honor.

THE COURT: Well, I didn't say I was going to adopt that.

MR. SMITH: I think the problem with Invincea's proposal is that it can be software or hardware. A lot of these functions operate solely -- you know, have to operate

with other hardware components. This inquiry today is just what the definition of a "data store switch" is.

And if we can switch --

THE COURT: Well, suppose you said, we do have, apparently, some hardware, or it does have an actual switch.

MR. SMITH: Correct.

THE COURT: If you said "software or hardware, or a combination of the two, that control access to a data store," would that make sense?

MR. SMITH: I think that's fine, Your Honor. I think --

THE COURT: Well, if it's fine with you it's probably not fine with the other party.

MR. SMITH: I think what's being conflated here is a lot of these things will only work in terms of the whole invention with other components. Some of those components are going to be hardware, some of those are going to be software.

If you look at slide 78 of our slides for data store switch, the patent makes perfectly clear that the switching of a data store may be logical or physical. The logical switching is switching --

THE COURT: "May be logical or physical."

MR. SMITH: Right, "logical switching is switching enforced purely by software."

So we would be more than happy with the alternative definition of "software or hardware that controls access to a data store," or the other proposed definition that "the software or the hardware or a combination of the two," would be perfectly fine as well.

THE COURT: What do you think about that?

MR. COLE: We're perfectly fine with saying that it's a combination of hardware or software, as you suggested. It's only the scenario where it's software alone that we have an issue with that proposal --

THE COURT: Well, if we say, "hardware or software or a combination of the two," we are saying software alone.

MR. COLE: Right. And, so, that is the portion that we have an issue with, because we don't believe that it can exist independently of the hardware.

THE COURT: Well, the trouble with that is nothing can exist independently of some kind of hardware.

MR. COLE: We agree, Your Honor, and that's why we want the construction to reflect that.

(There was a pause in the proceedings.)

THE COURT: Well, then, I don't think -- I think we'd have to say, "a combination of hardware and software that controls access to a data store," because neither one can do it alone.

MR. SMITH: Well, I think, actually, software can do

it alone. It can at least do a data store switch alone. Whether the rest of the --

THE COURT: Well, there has to be some sort of hardware device upon which the software operates.

MR. SMITH: If you look on slide 79 of our --

THE COURT: I mean --

MR. CUMMINGS: It's straight from the patent.

THE COURT: You say here, "may be logical or physical," and that's accurate. It can be logical, but the logical method would require a software program or some sort of hardware device, right? You can't just have software operating in a vacuum.

MR. SMITH: Correct, but the data store switch itself can work simply with software. It can just be a software program. That's all the definition of "data store switch." It would meet all the requirements of a data store switch without any hardware.

And if you look on slide 79, it explains this exactly. It says, "Please also note that data storage devices can consist of hardware and/or software and/or a combination of both."

And on the previous slide, again, it explains that the switching can be logical or physical. That logical switching is a switch --

THE COURT: Well, that's not part of the patent;

that's simply a statement from your expert.

MR. SMITH: No, no, no. This is -- it says it's the Krein -- this is the Krein Opening Declaration Exhibit C. That's the patent. That's the exhibit.

So both of these are the '598 patent, the specification. These are just exhibits to the expert's declaration, and the exhibit is the '598 patent, Your Honor.

THE COURT: Well, I don't like this "and/or."

MR. SMITH: And I guess our point on the alternative construction is that it can be software or hardware.

THE COURT: All right. Well, if it's in the patent then I'm going to go with what I said, which is "software or hardware, or a combination of the two, that control access to a data store."

MR. SMITH: Thank you, Your Honor.

THE COURT: Because that's right out of the patent.

All right.

MR. CUMMINGS: The next group of terms, Your Honor, are the "couple" and "decouple" terms.

THE COURT: Right.

MR. CUMMINGS: And that starts on 59 of Invincea's slides. And, again, 59 just shows the --

THE COURT: Did you say 59 or 69?

MR. CUMMINGS: 59.

THE COURT: Okay.

MR. CUMMINGS: 59 shows the language; 60 shows the proposed constructions.

The core issue starts on slide 61.

THE COURT: I'm sorry. I was looking at the wrong set of -- okay. I've got you now.

MR. CUMMINGS: So on 61 --

THE COURT: "A switching system for selectably and independently coupling and decoupling..."

MR. CUMMINGS: These are the red slides, Your Honor. 61 is the "couple" and "decouple."

THE COURT: Yes, I see that.

MR. CUMMINGS: So the issue with the "coupling" and "decoupling" terms is that the patent never defines it. It's just using it as the way that one skilled in the art would define it.

So Invincea proposed for Your Honor definitions for "couple" and "decouple" that come from these industry dictionaries. The IEEE is the main electrical and computer engineering organization that's out there, and there are some other technical dictionaries. So our definitions come directly from these technical dictionaries, since the patent doesn't explain it. Vir2us's constructions come from their expert's unsupported declaration.

Now, on slide 62 this shows the various disputes that the parties have. So Invincea contends that coupling

needs to involve power and information, because you can couple two devices to allow power to flow from one to another or couple them to allow information to flow. Well, Vir2us asserts that it should be limited to information, but I'll show that the patent talks about frequently electrical coupling, which is the flow of power.

Then another issue is, is it communication or is it transfer?

And then a third issue for decoupling is whether after being decoupled the device is enabled to exist and operate separately.

So on slide 63, Your Honor, Vir2us argues that it's limited to communication of information, but here we've got snapshots from both of the Vir2us patents that show that it distinguishes between communicatively coupling and electrically coupling. And sometimes it says it can be communicatively or electrically coupled, or sometimes it says it can be both. Vir2us's construction ignores the electrical coupling. And even the language of the claims in the '598 patent distinguish the communication and the electrical coupling, because they specify communicatively coupling.

If the Court adopts Vir2us's definition, then the term ends up being "communicatively allowing communication of information." So, effectively, they're writing the term "communicatively" out of the claim, which, of course, the

Federal Circuit says that rendering terms in the claims to be superfluous is denounced.

And then the next slide, 65: Vir2us also challenges this idea that once it's decoupled that the devices are thereby enabled to exist and operate separately. And, like I said, Your Honor, that comes from industry standard definitions.

But they ignore embodiments in the specification. And, in fact, what they cite -- they cite these two examples at the bottom of slide 65:

"Once a data store is decoupled, it may be deleted or replaced with a new one."

Or "data storage devices may be disabled, or disconnected, or switched on and off."

But, in truth, those examples show that Invincea's construction of "decouple" is correct, because data stores continue to exist after decoupling. These examples show that after decoupling they're able to be deleted, or not, they're able to be replaced, or not, or disabled or connected. So the fact that the device can be deleted meant that it existed after the decoupling. Otherwise, there would be no purpose for saying that it was deleted, if "decoupling" meant that it no longer existed.

And there's nothing about Invincea's construction that precludes a device from later being deleted or replaced

or repaired. The point is that just after they're disconnected from each other then you can take that data store, or whatever it is, and you can do something else to it; you can replace it or repair it or delete it. And there's nothing in our construction of "decoupled" that prevents that.

And then the other aspect of their reply brief that I wanted to comment on is that they're trying to say that our definitions of "coupling" are limited in the physical sense, but they're really not, because you can couple -- even accepting their view of logical devices and logical elements, you can couple and decouple them. So there's nothing about our definition of "couple" or "decouple" that depends on either their definition of "logical" or what our definition of "logical" is. There's nothing necessarily physical about our definition of "coupling" and "decoupling." It can be physical, a physical coupling, or it can be a logical coupling.

Do you have any questions, Your Honor?

(There was a pause in the proceedings.)

THE COURT: Well, in your definition of "couple" it seems like you're focusing on it may be power or information, instead of just information, which is what they say.

MR. CUMMINGS: That's right.

THE COURT: But in "decouple" they say "disallow

communication of information" and you say "to separate, thereby enabling them to exist and operate separately."

There doesn't seem to be much difference between the proposed definition of "decoupling," but there does seem to be in "coupling" because they don't have anything about electrical -- or power being transferred.

MR. CUMMINGS: Yeah, I think the main --

THE COURT: But "decouple" seems almost the same.

MR. CUMMINGS: I think the main difference about the decoupling is that we specify from these industry sources that when they're decoupled they can still operate and, you know, you may be able to couple it with something else; that they want the idea that -- and --

THE COURT: Once it's decoupled, it's over with.

MR. CUMMINGS: Right, it's essentially gone. I believe they argued that in their reply brief.

THE COURT: Well, it says it "may be deleted or replaced." It didn't say it will be, but it doesn't say it may be deleted, replaced, or continue to operate, either.

MR. CUMMINGS: Well, and the fact that --

THE COURT: In the context of the patent, there doesn't seem to be any reason for it to continue to operate, if you look at the context of the patent as a whole.

MR. CUMMINGS: Well, except --

THE COURT: They just used the switch to isolate

data which has been subjected to malicious activity, so there's no reason to save that or continue to operate it.

MR. CUMMINGS: Except that when you started off with Data Store 1, which was the original file, and it was being copied into Data Store 2, and Data Store 1 is decoupled -- well, you need Data Store 1 to continue to exist, because if there's a problem in Data Store 2 and you want to get a pristine copy of that, then you need to be able to recouple with Data Store 1 in order to be able to get that file.

But you're right, if there's a corruption in Data Store 2 you may not want it anymore, so when you decouple it then you have the option to delete it or to repair it. But the point -- and this is the difference in the scope that we think that the Court needs to clarify, is that merely decoupling doesn't mean destroying it or throwing it away.

You can decouple and then do something else to it; whereas, they want the jury to think that "decoupling" means throwing it away or deleting it. And that's a difference in scope that the jury needs to understand, that there really is a difference there. So that's why we specify --

THE COURT: Well, they didn't say that. They just said "disallow communication of information between the two" and then you can recouple. I mean, you've got all these terms: couple, decouple, coupling, decoupling. It doesn't say "recoupling," does it?

MR. CUMMINGS: No, but the patent does talk about coupling again after it's been decoupled, so, you know, recouple.

But, again, all of those have the understanding that the device can be decoupled, but that doesn't mean that --

THE COURT: Well, it seems to me that there must be some reason why -- that has to do with infringement that urges this dispute.

So let me hear from the other side and see what they have to say.

MR. SMITH: Your Honor, I guess we come at this from a much more basic thing. We don't want to start redefining the words in the patent if they don't need to be, and we think all of these terms -- Invincea is not correct. We don't come up with a definition from our expert, we're asking for just a plain and ordinary meaning of these terms.

We think "couple," "decouple," are terms that a jury can understand, especially since they're not going to just be asked what those terms mean in the abstract. They're going to be given the claim, and it has a specific outlining of what "couple" means in the context of those claims. You know, it's not just going to be what do you think a definition of "couple" is, they're going to be given the claim when they're making an infringement determination.

The whole idea between coupling and decoupling --

the Court is correct, the whole idea is to delete it, is to get rid of it. That is what the context is in terms of the claim.

We basically have three problems with their definitions. The first problem is recurring. I think the Court has seen what the recurring argument is. Coupling and decoupling can be performed by software or hardware. We think the language -- for instance, their proposed definition of "circuits" or "systems" -- if you look on slide 67 of our slide deck for "couple" and "decouple," it has a clear definition there that "coupling or decoupling can be performed by software or hardware."

The next slide, on slide 68 --

THE COURT: Well, wait a minute. Let me find 67.

MR. SMITH: All right.

(There was a pause in the proceedings.)

THE COURT: "Either physically or logically couples or decouples..."

Then we're back to "hardware and/or software."

MR. SMITH: Right. We think their definition of "circuits" or "systems" implies that it's some kind of couple or means some kind of hardware component. If you look on --

THE COURT: Well, I thought that's what the dispute was, whether it was software or hardware. I don't understand "power," because if they communicate with each other there

has to be some electronic way they're doing it. So I don't think putting "power" in there really makes any difference.

MR. SMITH: It probably doesn't, Your Honor. I guess what we're trying to do is -- you know, why keep redefining all of these terms in some way when they don't need to be.

THE COURT: I think that this is another situation like we were talking about, "switches" meaning one thing historically and something else in computer language. I mean, "couple" and "decouple" historically would imply some sort of physical act, like putting these wires in the back of your TV so you can have cable or something. I mean, you couple them. It's a physical act.

But I think in computer language "couple" can be accomplished either through hardware or software --

MR. SMITH: Correct.

THE COURT: -- or a combination of the two, which is what we used with "switches," and I'm wondering whether we ought to use the same definition here -- or the same type of definition here as we used for "switches" and say, "hardware or software, or a combination of the two, that allows or disallows communication" --

MR. SMITH: That would be fine with us, Your Honor.

THE COURT: -- "between" -- between who? I don't know.

MR. SMITH: That would be fine with us, Your Honor.

THE COURT: Well, it would at least be consistent.

MR. SMITH: Yes.

THE COURT: Either consistently right or consistently wrong.

MR. CUMMINGS: Well, I guess what I wasn't able to clarify last time is that our definition of "couple" incorporates both the physical that you're talking about, the connection, and that can be through a plug or through a wire inside the computer --

THE COURT: Well, if this program is operating to eliminate malicious activity, nobody is going to be in there pulling -- connecting and reconnecting wires on the computer, it's going to be done by the software.

MR. CUMMINGS: But that's the aspect of our construction that it can be the transfer of information.

So it doesn't need to be hardware, it doesn't need to be software. Our construction is complete, because there are some physical couplings that the patents talk about, and then a software module can be coupled to another software module.

THE COURT: Well, why shouldn't we just say, as we did for "switching," that it's "hardware or software, or a combination of the two, that allows the communication of information," and "decouple" would be instead of "allows"

that "disallows." To be consistent with our definition of "switch," why wouldn't that be a definition of these terms?

MR. CUMMINGS: Because that definition would omit the references in the patent to electrical coupling.

THE COURT: Well, it seems to me that "electrical coupling" is simply redundant. What other type of coupling is there? There's got to be some electrical function that the software enables. I mean, there isn't any transfer other than electronic. That's what we're talking about, isn't it?

MR. CUMMINGS: But you can have two software modules that are communicatively coupled so they're able to transfer information back on forth with each other, and ultimately it's done over the hardware, but that's a transfer of information that isn't necessarily --

THE COURT: Well, I don't -- I mean, I understand that they use the word "electrical" in the patent, but that's just redundant, isn't it?

MR. CUMMINGS: No. Really, technically, it's not.

THE COURT: Why?

MR. CUMMINGS: You can have a transfer of information that you don't have an electrical -- you don't have a wire from one to the other.

THE COURT: Well, does "wireless" mean that -- that doesn't mean that electricity isn't involved.

MR. CUMMINGS: Right. That would be a transfer of

information but not necessarily an electrical coupling. But I think the bigger issue is in the decoupling. That doesn't clarify for the jury that "decoupling" means that those devices that were coupled can still exist and you can do something to them, like delete or replace or -- and that's a difference --

THE COURT: What difference does that make?

MR. CUMMINGS: Well, that's a difference in the scope of the way the parties are approaching how "decoupling" is used.

The plaintiff's infringement contentions are saying "decoupling" means destroying it, but that's not consistent with what's explained in the patent. So that's why we're asking Your Honor to clarify for the jury that "decoupling" doesn't equal "destroy." "Decouple" means to separate them, either electrically or communicatively, and then if --

THE COURT: Well, there's nothing in the definition I suggested that said anything about destroying or not destroying. The definition that I suggested was, "hardware or software, or a combination of the two, that allows" -- or "disallows," depending on which term you're defining -- "communication of information." That doesn't say anything about whether it's destroyed or not or whether it can be used or not.

I don't see why in defining these terms we have to

get into whether after decoupling it's destroyed or not destroyed. What does that have to do with the definition of these terms?

MR. CUMMINGS: It's because plaintiff is reading "decoupling" -- they're applying "decoupling" to mean "destroy," and technically that's --

THE COURT: Well, the definition I'm giving it does not deal with that. Why should it?

MR. CUMMINGS: Well, if Your Honor is saying that "decoupling" does not mean "destroy," then we'd be fine with that.

THE COURT: Well, it's not saying that. It's just saying it disallows the communication of information. It's not saying that anything is destroyed or not destroyed. Why does that have to be part of the definition of these terms? I don't understand that.

MR. CUMMINGS: Well, because the way that they are applying "decoupling" -- so they're saying that when you de --

THE COURT: They're saying that what they do is after they decouple they destroy it.

MR. CUMMINGS: No, what they say is when you decouple -- when you destroy it that's decoupling. When you decouple, it ceases to exist; not that you decouple and then --

THE COURT: Well, but that definition doesn't say that. The way I'm proposing to define it doesn't say that, so they've got to say that somewhere else, don't they?

MR. CUMMINGS: So, I -- this is a dispute that's going to end up in front of the Court again because of the way that they are reading "decoupling," and that's why --

THE COURT: Well, I'm not defining "decoupling" as inevitably leading to the destruction once it's decoupled. That's not part of the definition.

MR. CUMMINGS: Okay.

THE COURT: And I don't understand why it needs to be. That seems to be a separate issue to me.

MR. CUMMINGS: If it's clear that "decouple" doesn't mean "destroy" --

THE COURT: It's not clear one way or the other. It's not clear that it means -- there's nothing in this definition that would mean that it would be destroyed after it was decoupled or that it would continue to be used. The definition doesn't deal with that issue.

MR. CUMMINGS: And what we're asking Your Honor to do is to clarify that for the parties, because that's a dispute --

THE COURT: I don't think that clarifying it is part of defining this term.

MR. CUMMINGS: Okay. We respectfully disagree, but

we're happy to move on.

THE COURT: In defining this term I don't think we should get into the separate issue of what happens after the decoupling. All we're doing is defining what we mean by "coupling" and "decoupling."

MR. CUMMINGS: Okay. I understand, Your Honor.

THE COURT: All right. Well, then, that's the definition.

MR. CUMMINGS: And then we also want to point out that the definition that Your Honor has proposed doesn't address power, which is part of the industry understanding of what coupling and decoupling comprise.

THE COURT: I don't see why I should.

MR. CUMMINGS: Okay. So the next term, Your Honor, if you want to --

THE COURT: Well, I think the next thing on the agenda is a recess.

MR. CUMMINGS: Very good.

THE COURT: I don't know how long you guys want for lunch. Do you want a full hour or what?

MR. BUNSOW: We're pretty fast, Your Honor, so as short as accommodates the Court's and the staff's needs. I know the court reporter needs to rest, for example. We can do it in 30 minutes, whatever is convenient.

THE COURT: Why don't we say we'll resume at 2:00.

It's almost 1:15.

MR. CUMMINGS: Okay, very good.

(A luncheon recess was taken.)

THE COURT: All right. Where are we? We just finished with "couple," et cetera.

MR. COLE: I think the next term up, Your Honor, is "dynamically configurable."

THE COURT: Okay.

MR. COLE: So I think, Your Honor, that this is the last of the terms that addresses the parties' dispute regarding whether it has to be physical or whether it can be just software.

So I'll begin by pointing out the claim language here. This term arises in claim 10, and it requires that "plurality of processing logic devices and at least said first and second storage are dynamically configurable..."

So we talked about those two terms earlier this morning. The parties agreed that the processing logic device is a piece of hardware, and then we had a dispute over whether the data store themselves were hardware or software or a combination of both.

So I'm looking at slide 70 here, and we have an identification of the parties' proposed constructions.

As you can see, on 71 here it's identifying what the core dispute is; whether these items that have to be

dynamically configured are actually physical components.

Invincea's construction comes directly from the specification, Your Honor. On the next slide there's a quote from the specification, and it indicates that "the paring or switching connection between physical components, such as the CPU," which is the processing logic device, and the particular data store dynamically change.

And I think that goes precisely to the issue here; that we're deriving this physical component requirement from the specification. And the Federal Circuit is clear in *Phillips* that "a fundamental rule of claim construction is the terms in the patent are construed with the meaning with which they are presented in the patent document." Here it says they are physical components.

And it's also reflected in the next slide, slide 70, which depicts this. It shows that the CPUs, which are the processing logic devices, are connected with the data stores, of which it shows three in this picture, through that data store switch.

And, "dynamic configuration" simply means that it can be connected from CPU 1 to Data Store 1 or CPU 2 to Data Store 2, or CPU 2 to Data Store 1, any of these various configurations. But, as depicted there and as stated in the specification, they have to be physical components.

Now, Vir2us says that Invincea is only cherry

picking examples here, but these are the only examples that are given in the specification for dynamic configuration of processing logic device and data stores. What Vir2us refers to in their briefing is dynamic configuration associated with either logical computing environments or dynamic configuration of software switches. Those are not what the claim addresses, Your Honor, and, so, those are not relevant to defining what "dynamic configuration" means in the context of this particular claim.

That's why we proposed that this particular construction requires physical components, Your Honor.

THE COURT: All right.

MR. SMITH: Your Honor, this is similar to the other disputes on whether it has to be physical or it can be physical and software.

If you turn to our slide 55, again, it is true that there are some embodiments that have physical limitations, but there are also embodiments that have software limitations, just like the earlier claims. And if you look at slide 57, these are from the '541 patent. It says, "In some of these computing systems the configuration of the plurality of computing environments is dynamically configured as to hardware, firmware, software, or any combination of these." So nonphysical components such as software components are also dynamically configurable.

Turn to the next slide, slide 58. And it has these computing environment configurations and processes that may be predetermined or dynamically determined and configured, controlled environment, protected storage, or desktop environment, and even a switch or switch configuration.

And, again, another example: "In the context of the embodiments of the invention, the switch and the switches and the switching means and the like are terms to be given their broadest possible interpretation, and any device, logic hardware or software that either physically or logically couples or decouples a signal from one location to another location or that enables or disables an ability to communicate a signal..."

All of these are -- on our next slide we even have their own expert, Invincea's expert, has admitted that switching could be done logically, and the software switches are, of course, dynamically configurable.

So our position on this term is we think "dynamically configurable" is perfectly understandable to a juror, that term, "dynamically configurable." And the problem with Invincea 's proposed construction is, again, like the other terms, it is putting in a physical component definition that we think would exclude the other embodiments that I've just mentioned in the patent.

So we do have an alternative construction if the

Court is not comfortable with just a plain and ordinary meaning, and that's just an adjustable configuration, which we think that's consistent with all the embodiments in the patent and would not be just restricted to the physical component.

THE COURT: All right. Well, the problem with the term "dynamically configurable" is that I think the jury may think of that as vigorously configurable, such that I don't think "dynamically" conveys to the jury that it just means that it can be changed in an operation.

Again, I don't agree with the defendant's contention that you have to limit this to physical components, as they have wanted to do with a number of terms. The plaintiff's construction -- it says, "configurable in a non-fixed manner or in which the configuration can be changed during operation." I don't know why you need the first part of that phrase. I think you can just use the term "the configuration can be changed during operation."

MR. SMITH: That would be fine, Your Honor. The one we were going to propose is just "an adjustable configuration."

THE COURT: "Adjustable configuration"?

MR. SMITH: "Adjustable configuration."

On slide 60 of our presentation it has that configuration, and there's a citation there that, "part of

the specification may be fixedly or dynamically configured." We think an adjustable configuration would encompass that, and it would solve the issue on the term "dynamically" meaning that a juror might confuse that with "forcibly" or -- if the term was just an "adjustable configuration."

THE COURT: I like the other better. I'm going to go with, quote, "The configuration can be changed during operation," unquote.

MR. SMITH: Okay. Thank you, Your Honor.

THE COURT: All right. Does that bring us -- leave us with just one phrase, that long one?

MR. COLE: That's right, Your Honor. The last remaining term out of the Vir2us patents is the term "switching system," the last one that we haven't addressed today.

THE COURT: "Switching system for selectably and independently..." et cetera? Is that what you're talking about.

MR. COLE: That's correct, Your Honor.

THE COURT: Okay.

MR. COLE: So the slides here begin on slide 77 of defendant's presentation, and begin by identifying the claim language here. Again, it's the claim language that Your Honor just mentioned.

I would note that the claim term -- I think, for

convenience sake -- that is quite a mouthful to say, so, for convenience sake, we'll be referring to it as the "switching system," if that pleases the Court.

THE COURT: That's fine.

MR. COLE: But it should be understood that what we're talking about is the entirety of that phrase.

THE COURT: Right.

MR. COLE: So the core dispute here, at least initially, is whether this term is governed by 35 USC, Section 112, paragraph 6, whether this is a means-plus-function term.

Now, we have reproduced here, on page 78, the statute which indicates that the patentee may claim a combination that can be expressed as a means or a step for performing a function without the recital of structure.

THE COURT: Right.

MR. COLE: And you'll see that there's that "means" or "step for" language. Now, a presumption is created when that language is not used, as it is not used here; however, in the last two years the Federal Circuit issued opinion in *Williamson* -- I'll refer to it as *Williamson II*, because it was actually an en banc decision after a previous *Williamson* decision.

But *Williamson II* rejected the notion that there's a heavy burden to overcome there, and, in fact, indicated that,

"the heavy burden that previously existed placed a thumb on what should otherwise be a balanced scale." So, there is a presumption, but the weight of it is limited.

So the point here, Your Honor, is that by claiming a switching system for performing this function, the switching system does not actually indicate any structure. In fact, it's just an alternative way of saying that it's a means for performing that function.

Now, the parties agree that the function, if it's construed as 112, 6, is everything that follows that "for" statement. So none of that on its own provides any structure. The only structure that can exist would come from the phrase "switching system."

And the standard by which we determine whether that's structural or not is found on page 79 of the slides, in which the *Williamson II* court said that the essential inquiry is not whether or not the word "means" is used but, quote, "whether the words of the claim are understood by persons of ordinary skill in the art to have sufficiently definite meaning as the name for structure."

So let's take a look at those words and try and understand what they mean.

"Switching," as I mentioned earlier today, is a verb and refers to the action of switching. It describes function. It describes an action taken, not the structure of

something that takes that action. That would be called "switch." That's not the term that was used here. The term used here is "switching," the verb.

They also use the term "system." A system can mean anything. That has no specific structure. It's what the Federal Circuit refers to as a nonce word, a word without content. You can't derive anything from the word "system" alone about what exists there.

And if you combine those two words together they don't have any sort of synergy, where combining them somehow makes "switching system" a term that's recognized in the art. Each word just carries its own meaning, and, as combined, a switching system is just a generic system that performs the function of switching. And that's supported by the expert declaration of Dr. Aviel Rubin that Invincea submitted.

When you add to that the fact that the specification is silent as to how the claimed switching system performs the selectably and independently coupling and decoupling, then what you have is the conclusion that the switching system has no structure. And Vir2us said that this particular approach is something that was overruled or that was rejected by the Federal Circuit -- in this case *Lighting World* in 2004, I believe -- but, in fact, this is the precise approach that was employed by the *Williamson* court in analyzing the patent in that seminal case in the Federal Circuit that just

happened a couple of years ago.

So I think it is an appropriate approach to use in light of *Williamson*. In fact, *Williamson* overruled the *Lighting World* case that Vir2us relies on. In fact, many of the cases that Vir2us relies on in its briefing were specifically overruled by *Williamson*. *Williamson* is hardly addressed at all in Vir2us's brief, and it's because Vir2us's arguments are directly contrary to what *Williamson* requires.

So, fundamentally, Vir2us's argument is that structure exists in the switching system, and that structure -- or "class of structure," as they refer to it -- is hardware and software for performing the function. It's a very generic statement that any hardware or software can do it.

And on page 82 of the slides we've noted a particular statement that they made in their briefing that, "the name of a class of hardware and software structure to enable or disable communication between the processing logic device and storages," and that's how they define the structure. But the Federal Circuit has explicitly said that hardware and software alone are not sufficient structure to avoid the ambit of 112, 6, and they've said it many times, Your Honor.

On slide 83 we list a number of those decisions that reject this approach. In *Williamson II*, in particular, as I

mentioned, it was construing the term "module" and said that, "...module, as 'a generic description of hardware and software that performs the specified function' 'is tantamount to using the word 'means,'" and thus is a means-plus-function term.

Similarly, in the *Robert Bosch* Federal Circuit decision the year prior to *Williamson*, the courts indicated that, "the question is whether the language" of the claim -- that is, the claim language -- "names particular structures, or instead, refers only to a general category of whatever may perform the function."

Saying "hardware and software" is equivalent to saying anything that can perform the function is what we intended to cover, and that's not acceptable.

Another overall approach that Vir2us takes is they attempt to describe the structure by, rather than referring to actual structure, referring to function. And on page 84 of the slides we have a number of examples where they do that.

In the first example there they say that the switching system is the name for class and structure, which is kind of a conclusory statement. But they say it's a class of structures that includes hardware, software, or hardware and software, structures. And, so, the question is what are the characteristics of that structure.

The characteristics, they say, are "to enable and disable communication between the CPU and storage." That's functional language, and that same way of trying to describe it functionally rather than structurally is rampant throughout both their briefing and their expert's declarations.

Now, the Federal Circuit has said that such functional descriptions do not identify structure. And there was a quote in the *Robert Bosch* case I mentioned earlier which said, "labeling the devices as 'electronic'" -- as the expert did in that case -- "and repeating their function does not identify structure."

So those are sort of general arguments that are made throughout the briefing, to give the flavor of what Vir2us is saying, but specifically they argue three points. They say that structure for the switching system is found in the claim language; they say that it's found in the specification; and they say that it is found through the understanding of a person of ordinary skill, which they define through their expert. So I want to address each one of those individually. To begin with, the claim language:

So they point to two aspects of the claim language that they claim impart structure to the switching system, and those two are summarized here on page 86 of the slides:

First they say that the "selectably and

independently coupling and decoupling" clause defines the structure of the switching system. And, again, using functional language here, they say it defines the structure by requiring that it be capable of allowing various connections to the storages.

And they also say that there's structure from the fact that it's capable of receiving a control signal. Again, these are functional descriptions, but they don't tell us anything about what the switching system is.

So just graphically here, if you look at slide 87 of the presentation, we see a depiction from Figure 2 of the '541 patent, and we can see that there are things that are connected to the internal switch here, the data store switch in this case, and there are control signals, maybe, that are going into that. But what's actually happening in between the CPUs and the data stores in that figure, the claim language doesn't tell us anything about that.

That is a complete black box, from the perspective of the claim language. The fact that it's connected to a CPU or that it's connected to -- or I should say "coupled" to a CPU or "coupled" to a data store doesn't tell us the structure of that black box.

Regarding the second argument that they're in a structural switching system, what they're arguing, that it receives a control signal and that that somehow imparts

structure, that was an argument that was explicitly considered and rejected by the *Williamson II* court. And that's quoted on page 88 of the slides there, but, similar to here, there their expert -- well, let me back up a second.

The claim language that was at issue in *Williamson II* was a distributed learning control module, and essentially what it was was it controlled communications between remote devices. One was a presenter, and one was a viewer. It was like a remote classroom.

That very same distributed learning control device in the claim language in *Williamson* also received communications, and the Court recognized that it received those inputs and outputs but said that that was irrelevant because the information or communications that it was receiving did not inform the structural character of the limitation in question. And I think that applies equally in this case.

So that's the claim language, Your Honor. I also wanted to talk about the specification and what support Vir2us seeks from that.

On page 89 of the slides we have a quote from Vir2us's brief where they quote the '541 patent as saying, "the general switch system may be implemented in hardware, software, and/or a combination of hardware and software." And their position is that that hardware and software is the

structure and that that's identified in the specification and satisfies 112, 6. But, as mentioned earlier, hardware and software alone is not sufficient.

And I also want to make the point here, because they do it on several occasions, that the general switch system in this quote is not the switching system of the claim. The switching system of the claim is the system that performed the particular function, selectably and independently, coupling and decoupling, and so forth. The general switch system here does not perform that function, and they haven't cited to anything to suggest otherwise.

This also applies to the data store switch. The data store switch, which they also reference, they provide no support to indicate that it actually performs the function of the claimed switching system, so it doesn't necessarily inform us what the structure of the claimed switching system is.

Now, there is one particular phrase that they identify in their responsive brief, and that's reproduced here on slide 90. Now, this particular passage from the '541 patent is kind of a catchall sentence. You know, they describe a particular embodiment and say, "but it could be these other things," and here it says that, "the switching system can be any one, plurality, or multiplicity of mechanical, electrical, transistor, diode, microprocessor,

digital or analog, that can accomplish the desired switching."

So, although this quote actually mentions diodes, transistors, and microprocessors, it also mentions a number of other conflicting characteristics, suggesting that it's not describing any particular structure or class of structures, but, rather, it's just giving a summary of many different things that the switching structure could be.

This goes back to the point I was making earlier: If you just list every type of possible switching structure in the patent, what you're really saying is, "We're claiming all means or all methods for performing this function," and that's precisely what the Federal Circuit has rejected.

In fact, in the *Robert Bosch* case, again, on slide 92 there's another quote that says, "Merely listing examples of possible structures is insufficient to avoid invocation of 112, 6." And the Court goes on to explain that the means-plus-function language defines a category in functional terms, and, of course, it's natural that there would be multiple structures that fall within that, so it would be easy to provide a list. That's not the point.

The point is that the patentee, by using functional language in the claim, has limited itself to only the particular structure or class of structures that emanate from the claim language here, the "switching system." So whatever

the switching system is structurally, it can't be everything. So that's the specification support.

I also wanted to briefly address the extrinsic support. Here Vir2us relies on several declarations from Dr. Krein, if I'm pronouncing that correctly. Dr. Krein essentially adopts the same evidence and opinions that Vir2us set forth in the brief and that I just discussed a moment ago. He does have one additional point, however. He notes that, "one of ordinary skill would understand that the 'switching system' could be software structure in the form of 'a microprocessor executing certain well-known sets of instructions.'" I think I have a typo in the slide there, but...

And if you'll take a look at slide 94 of defendant's presentation, "Dr. Krein adds that the skilled artisan would recognize that the function of the switching system could be implemented with..." the switch statement, which he writes a piece of code here that would perform that function. And, so, Vir2us argues, in light of this, that one of ordinary skill in the art would understand what structure is required by the phrase "switching system."

But this line of reasoning necessarily fails, Your Honor, and it fails, once again, because of *Williamson II*. Now, *Williamson II* considered and rejected the very argument that Vir2us's expert proposes. In the *Williamson II* case the

patent owners' expert said, "I would know exactly how to program a computer to perform the recited function," and the Court responded, "But the fact that one of skill in the art could program a computer to perform the recited functions cannot create structure where none otherwise existed."

So, to sum that up, this is not a written description dispute. We're not saying that somebody of skill in the art couldn't figure out how to implement this switching system. What we're saying is the patent doesn't disclose it, and it's required to because they chose to use functional claim language.

I should also mention that Dr. Krein's contention that they have -- that the patent covers software structure rather than hardware structure is also problematic. And I guess I should step back a moment here.

I'm mentioning the word "structure" a lot during this presentation, but "structure" doesn't necessarily mean kind of what we think of it in the everyday parlance. "Structure" doesn't have to mean an actual physical device, and Vir2us seemed to take that implication that it couldn't be software. It can be software, and you can have software structure, but the Federal Circuit has defined what software structure looks like. You can't just say "software that performs a function." Rather, you have to say -- and this is reproduced on page 96 of the slides -- "the structure of

computer software is understood through, for example, an outline of an algorithm, a flow chart, or a specific set of instructions or rules."

There is no algorithm, there is no flow chart, there is no specific set of instructions or rules in the '541 patent that describe selectably and independently coupling and decoupling, and so they do not have software structure in this patent. So that deals with the extrinsic record.

Now, I was going to move on at this point. That is why we believe that 112, 6 applies in this case. Now, how it applies is another question. Does Your Honor have any questions regarding whether 112, 6 should apply?

THE COURT: Yes, I do, but I think I'll have to hear from the other side on that issue.

MR. COLE: Sure. We'll divide it up that way.

MR. SMITH: So let me just start at the beginning, Your Honor.

112, 6 shouldn't apply to this claim term because they don't use the "means" language. That should be the beginning and end of this argument. There is no "means" language in the claim.

We have on our slides, on slide 81 and on slide 82, as the claim language, "a switching system" --

THE COURT: They don't use that particular word, but they say the word "system," as used in the patent, is

interchangeable with "means," so it might as well say "means."

MR. SMITH: Well, we strongly disagree with that, because "means" is a drafting decision; that every patent prosecutor knows if they use the "means" language that 112, 6 will apply.

So they could have said "means for" or other language that's not in this claim, but it's a threshold issue that is also consistent with the *Apple* case and the *Williamson II* case that if "means" is not used there is a presumption that 112, 6 does not apply.

Now, the difference between the *Apple* case and the *Williamson II* case is the *Apple* case and the line of cases before the *Apple* case say that there's a strong presumption that 112, 6 doesn't apply. *Williamson II* doesn't change that. There's still a presumption, there's just criticism that it shouldn't be a strong presumption. But the presumption still applies, and the burden is on the defendant, in this case Invincea, to overcome that presumption that this is "means" language. So that's the first point and I think the point that should be dispositive.

So on slide 83, section 112, 6, we believe, is presumed not to apply because the claim does not use the "means for" language.

On slide 84 we have the burden to overcome that

presumption, from the *Apple* case. And, like I said, in the *Apple* case it was a strong presumption. In the *Williamson II* case that presumption still exists. And the burden is not met if the claim term connotes a sufficiently definite class of structures to a person of ordinary skill in the art when read in light of the claim language and specification.

And that's important in this case because, unlike the *Williamson II* case or the *Bosch* case or the other cases that Invincea talked about, in this case there actually is a description of exactly what the switching system is supposed to do right in the claim language: "a switching system for selectably and independently coupling and decoupling the processing logic device with the first storage and/or the second storage under automated control..." Those types of descriptions did not exist in those other cases; they had terms that were undefined and did not have a connection with the other claim terms.

And in the *Apple v. Motorola* case, on slide 86, it says that, "other claim limitations describing a claim's terms and operation and connection may provide structure to a claim term." And that's what exists in our case.

Slide 87 has that claim language underlined that I just read.

And, in addition, we have, "the claim language does provide an understanding of a class of structures to a person

of ordinary skill in the art." The only way we can show that is to find a person who is a person of ordinary skill in the art and ask them, and that's what we've done in our expert declaration.

The citations to the patent itself on slide 89 show, in the specification, that a switching system does connote a class of structures, both software and hardware, in light of the specifications.

And, again, on slide 90 the expert agrees that, "a switching system would be readily understood by a person of ordinary skill in the art to designate a sufficiently definite class of structures that include hardware and software switching structures."

And, again, the citation on slide 91 for the same purpose.

The *Apple* case, on slide 92, mentioned that for the 112, 6 question the Federal Circuit has rejected attempts to "consider a claim term in the abstract or in isolation, without regard to other terms used in the context of the claims and specification," and that's exactly what Invincea has done here.

In fact, not only is it what they've done here; their expert, who provided the declaration as the basis for this argument, admits it in his declaration.

On slide 93 he says, "One of ordinary skill would

understand the term 'switching system' in the abstract to have no definitive structural meaning in the field of computer networks."

Again, on slide 94, the expert, Invincea's expert, considers only the term in the abstract and in isolation, with no regard to the claim language or the specification. First he looks at the term "switching," and then he looks at the term "system" and even decides that, you know, it could be a system for paying your bills in which you write a check or address an envelope or affix a stamp. He says, "No structure would be implied simply because the methodology is called a system."

Well, the Federal Circuit says you're not supposed to do it in the abstract. You're supposed to look at the claim language and determine whether the claim language has provided, you know, the necessary structure for the claims limitations, and that's what we have in this case.

The *Apple* case is interesting because it has, you know, an interesting passage in the *Apple* case on the structure to a person of ordinary skill in the art: "...for computer-implemented inventions may differ from more traditional mechanical structure." You know, looking for a physical structure in a computer software claim is fruitless, because software does not contain physical structures.

And it has, "further, that requiring traditional and

physical structure and software limitations lacking the term 'means' would result in all of these limitations being construed as means-plus-function limitations." And, so, we're back to where we started, at least on the threshold question, and we believe that 112, 6 should not apply, because the "means" language is not used and that there is a presumption that 112, 6 should not apply. And we do not believe that Invincea has overcome that presumption, mainly for the reason that the claim itself describes what the switching system is supposed to do.

THE COURT: All right.

MR. COLE: May I respond, Your Honor?

THE COURT: All right.

MR. COLE: So two points that I wanted to make, Your Honor.

First, my colleague here has suggested that *Williamson II* merely criticized *Apple* or the prior set of cases that found the presumption of no 112, 6 when the words "means for" are not present; that they merely criticized that standard. That's not accurate. In fact, what they did was expressly overrule all of those cases on that grounds.

So this is not the case where the standard that applied in many of the cases that they discussed -- *Apple*, *Flow Healthcare* was another case that was cited by them -- a number of cases going all the way back to 2004, all of which

were expressly overruled by *Williamson*. The strong presumption does not apply. It is the balanced scale, according to *Williamson II*.

The second point I wanted to make: You were just told that Invincea relied only on the claim language in the abstract. That is not accurate. Invincea reviewed the entirety of the specification, the intrinsic report, the extrinsic record. The problem is that there is nothing in the patent that describes a switching system structurally that performs the claimed function and, thus, there's nothing to analyze in that regard.

As I mentioned earlier, they cite other things, like a general switch system, a data store switch, other things that sound similar but, in fact, don't perform the claimed function and are, thus, not the same thing.

The last item I wanted to address, Your Honor, was you were told that a class of structures which they identified again as hardware and software, which is not a class of structures at all -- but that the class of structures is informed by the claim language which says how it connects to other things. But, as I showed you in the depiction of Figure 2 in our presentation, just knowing what it connects to on the outside does not tell you what's inside that black box, what that black box is made up of.

There are other cases where descriptions are made of

what's inside that black box and how it operates, and it's in those situations where classes of structures are permitted to be the definition or the structure that supports the claim language, and that's not present here, Your Honor.

THE COURT: All right. I'm going to have to take another look at this. It's not clear. We can't keep going back and forth. I'm going to have to look at this. I'll take this issue of this particular phrase under advisement.

MR. SMITH: Understood.

THE COURT: I believe that brings us to the '422 patent, does it not?

All right. It seems as if the main dispute in the '422 patent is whether the environment relates to anything beyond browsing the Web -- or browsing for Web sites.

Before we hear the plaintiff's proposed definition of the terms, I want to give the defendant an opportunity to explain how their patent works, as I did for the plaintiff. It does appear that the '422 patent is designed to be a Web browser, not to be a general purpose browser, so I will allow the defendant to explain why it's more than that, which goes to part of the definition of the terms as well.

MR. CUMMINGS: Sure, Your Honor.

If you'll turn back to our slide 21, just to refresh our recollection about the operation of the Invincea invention...

(There was a pause in the proceedings.)

THE COURT: 21?

MR. CUMMINGS: Yes.

(There was a pause in the proceedings.)

THE COURT: Right. I remember we went over this.

MR. CUMMINGS: Right. So just to refresh your recollection, when a user wants to use a program that may expose them to a contaminated file -- and that's browsing on a network or on the Internet or -- then it creates one of these virtual browsing environments. It's up in the upper left-hand side.

THE COURT: Right.

MR. CUMMINGS: So it creates these virtual browsing environments.

Now, the dispute here -- and we can flip over to 105 in our slides. Here the core dispute --

THE COURT: 105?

MR. CUMMINGS: 105, yes.

THE COURT: All right.

MR. CUMMINGS: So the dispute is what type of an application can run in this virtual browsing environment.

Our construction comes directly from the specification. The specification says that the virtual browsing environment can isolate the execution of any type of application, but Vir2us reads "browsing" there to be limited

to a Web browser, which technically is not accurate. Maybe colloquially when someone refers to a browser, but, as I'll show you, "browser" is broader than a Web browser.

They're trying to limit it to a particular type of browser, being a Web browser, but on slide 107 you'll see the quotation from our patent specification that clearly defines what a virtual browsing environment does. That's 107. It says here in the middle, "the VBEs" -- the virtual browsing environments -- "may be used to isolate the execution of any type of application." And then it goes on to emphasize four different times that it can be any application downloaded to another computer, any application that includes any invalid or unverifiable certificate, any application, any application.

On slide 108 the Federal Circuit, in *Phillips*, emphasized that regardless of what one skilled in the art would understand the term to mean, when the patentee acted as his own lexicographer in the specification then that lexicography should govern. And, so, the patentee -- regardless of what "browser" means, the patentee defined a virtual browsing environment to be able to execute any application.

But then Vir2us's next argument is, well, "browser" means a Web browser, but that's just not correct.

THE COURT: Well, the problem is that in your

argument as to the definition of "virtual browsing environment" you say that the plaintiff seeks to improperly broaden the scope of the claims by making reference to the specifications -- wait a minute. Actually, it's the other way around.

In other words, your arguments as to the definition of the two terms in issue seem to be contradictory.

MR. CUMMINGS: Well, our definition of --

THE COURT: I mean, you accuse them in one for trying to limit the scope of the term by importing limitations from the specification, and what you're doing in the first definition is to broaden the terms used in the claim by reference to the specifications.

MR. CUMMINGS: Well, the --

THE COURT: So it seems like you're trying to have it both ways.

MR. CUMMINGS: Well, there's a difference, Your Honor, between trying to import an embodiment, as described in the specification, and a definition that the patentee lays out in the specification.

And back on, I think it was, 107 it shows that the virtual browsing environments may be used to isolate the execution of any type of application. So even if this is considered to be an embodiment and not a definition, their proposed construction limiting it to a Web browser would

exclude this embodiment. We don't believe it's an embodiment, we believe it's the definition, but even if it is an embodiment, their construction is inappropriate because it would exclude this embodiment. But the other point that I want to clarify is that "browser" is a general term. It doesn't mean Web browser.

And if you turn to slide 110, I've got a few screenshots of some computer programs that have browsing functions. And, so, they're browsers, but they're not Web browsers, and they're viewed as something else. So on 110 is a program that's on Windows called Windows Explorer. It allows you to browse around your files and your folders on your computer. It also allows you to browse on a network. And, you know, in any of these instances you could run into an infected file, and so there's reason why you'd want to run Windows Explorer in one of these virtual browsing environments.

THE COURT: Well, we've gone beyond what my intention was. I just wanted a definition of the patent from you, and then I want their objection to the terms.

MR. CUMMINGS: Oh, okay. I'm sorry.

THE COURT: Then I'll allow time for you to respond.

MR. CUMMINGS: Okay, Your Honor. I'm sorry. I misunderstood.

THE COURT: I wanted to do it the same way we did it

the first time around.

MR. WIN: Good afternoon, Your Honor.

I want to make one thing clear in that we are not trying to limit the scope of the term to a Web browser. In fact, it's the claim language itself that is limiting it to a Web browser. And I'll take you to the claim. Let's take a look at it.

If you look at the last limitation of this claim where it starts, "With transmitting information" --

THE COURT: What slide are you on?

MR. WIN: I'm sorry. It's slide 102.

THE COURT: Okay.

MR. WIN: And down below it, the last limitation of the claim, it's talking about a browser application executed to access at least one Web site, and a couple of lines up it talks about a Web site address. So now here the claim language itself is defining the scope of the term "browser application" as a Web browser. There's no other application out there that can access a Web site other than a Web browser.

And the Federal Circuit has made it very clear that we first look to the words of the claims themselves, and the context in which a term is used within a claim can be highly instructive.

THE COURT: All right.

MR. WIN: That's all, Your Honor. Thank you.

THE COURT: Well, that was the point I was trying to make, Counsel, is you're trying to broaden this claim by importing language from the specification, when the claim term itself refers only to Web sites. It doesn't refer to any other application in claim 1, does it?

MR. CUMMINGS: Well, the flaw with Vir2us's argument was this idea that no other application can access Web sites, and that's just plain wrong.

If you'll turn to slide 14 -- 114, I mean, 1-1-4...

THE COURT: I don't understand what you mean by that.

MR. CUMMINGS: There are programs other than Web browsers that can access Web sites. On --

THE COURT: Well, I didn't understand that to be his argument. I just understood his argument to be that claim 1 only makes reference to browsing Web sites, it doesn't make reference to any other application; that is, any use of this browsing system other than to browse Web sites.

MR. CUMMINGS: Claim 1 never says "Web browser," it says "browser." And then at the end it refers to accessing a Web site, and Mr. Win argued that the only programs that can access Web sites are Web browsers, and that's wrong.

What I want to show you on 114 is these are snapshots of Microsoft Word, a word processing program that

nobody would really think of as a Web browser, but if you look on the right-hand side these are instructions on how to use Word to save or retrieve a document from a Web site. It says, "Save a document to a Web server." So this is showing that you can use other programs to access a Web site and access documents on a Web site.

So their attempt to read "browser" in the claim language to mean "Web browser" is not supported by the claim or the specification. And the fact that the program accesses a Web site also doesn't mean that it's a Web browser, because here's an example where Microsoft Word can access a Web site but is not a Web browser.

So their attempt to narrow the scope of the claim to be limited to just a Web browser and not to other types of programs that can access Web sites is not supported either by the claim language or by the specification. And yet our definition of the virtual browsing environment being able to execute these other types of functions is consistent with these other programs that have browsing functions, as well as the specific definition that's in the specification.

THE COURT: All right.

MR. WIN: Your Honor, one point that I wanted to make was if they meant for this to be any other type of application they would have said so, but the claim is talking about Web browsers. It's talking about a browsing

application for accessing Web sites, and that's pretty clear to me that they're talking about a Web browsing application. They're not talking about a Word application or a calculator or anything else.

And I'll submit to the Court that last night I tried to go into Microsoft Word and typed in "www.edva.court.gov," and it took me nowhere. I just couldn't go to a Web site using any other application other than Internet Explorer or Firefox or any of the typical Web browsers that we all know.

Do you have any other questions, Your Honor?

THE COURT: It seems to me that the claim language refers to creating a virtual browsing environment to browse for Web sites, not for anything else, so I believe the plaintiff's construction of this term is accurate, a virtual execution environment specifically for a Web browser.

All right. The next term is "collection computer."

MR. WIN: Your Honor, we believe that the proper construction for this term should be "a computer server connected over a network." And the reason why we wanted to construe it this way is really to make sure that it's clear that the collection computer is separate from the main computer that's doing all the other steps.

Perhaps I should take you back to the claim language on slide 106. And on that slide claim 1 recites a number of steps, including the step of monitoring, determining,

terminating, and transmitting, which are all performed by the main computer.

Now, if we focus on the last step performed by the main computer, which is transmitting information, what is occurring is the main computer transmits information to another computer, which is called here the "collection computer." And, so, we just want to make sure that it's clear that the main computer is a separate computer from the collection computer, and that is illustrated here on page 108.

On page 108 there's a picture where you have the main computer 102 and you have the collection computer 108, and they're connected to each other over a network. And when we say "network" it's pretty broad. It could be anything. It could be a wired network, a wireless network, just to make it clear that these two computers are separate and apart from one another. It's described in the specification of the patent as well to the right of the picture. We believe that Invincea's definition is incorrect only in that it makes it unclear whether 102 is going to transmit that information to itself or to a separate computer, 108.

Let me read Invincea's proposed definition:

Their definition is "a device for receiving collected information." Under their definition, it's unclear whether 102 is going to transmit that information to itself

or whether it's going to send it to a different computer, 108. We believe, based on reading the claim language and the specification, that 102 is sending it to another computer other than itself, to 108, and that is the reason why our definition reads, "a computer connected over a network," to import that separation.

THE COURT: Well, why don't you say, "a separate computer connected to the main computer through a network"?

MR. WIN: Sure. We would be fine with that, Your Honor.

THE COURT: I have a feeling that the other side wouldn't be fine with that.

MR. COLE: Actually, we would also be fine with that construction, Your Honor. Our dispute was whether the word "server" needed to be included in Vir2us's construction, and they haven't made that argument here, so we would be fine with that proposal.

THE COURT: All right. So that would be "a computer connected to a separate computer through a network."

MR. WIN: Yes, Your Honor.

THE COURT: Have we got that?

MR. WIN: Yes.

THE COURT: Okay. All right. The third term is "Web site address." And this is a little bit unique in that the defendant wants to define the term in its patent, and the

plaintiff says, "Use it as written."

Am I correct there, or have I got it backwards?

MR. WIN: That's correct, Your Honor.

THE COURT: Okay. So your position is it doesn't need construction.

MR. WIN: That's correct, Your Honor. "Web site address" is something we all know. It's an address to go to a Web site. We think the plain and ordinary meaning is quite clear, and we don't need to complicate things and try to give it some definition.

An important point that I want to make, though, is that if you look at Invincea's definition, not only is it unnecessary, it goes so broad that it starts to cover things that actually are not Web site addresses. So it's too broad and to the point where it's incorrect. And I can go through that for Your Honor, if you would like.

THE COURT: Yes, I would like.

MR. WIN: Okay. So let's start by looking at their definition. They want "Web site address" to be defined as "information used to identify a server hosting a Web site."

Well, that could be anything. It could be the model number of the server that's hosting a Web site. That wouldn't be very helpful. That wouldn't get you to the Web site that you want.

Another example of what would fall under that broad

definition is an IP address, and that's an example that Invincea has --

THE COURT: What kind of address?

MR. WIN: An IP address, which stands for "Internet protocol."

THE COURT: Okay.

MR. WIN: An IP address is certainly something that does identify a server, any kind of server, for that matter. In this case they're saying that it's an address that identifies the particular server hosting the Web site. And that's just too broad, because an IP address cannot be equated to a Web site address.

I think the simplest example would be this next slide, slide 116.

THE COURT: 116? All right. 115 and 117 -- I don't see 116.

(There was a pause in the proceedings.)

THE COURT: Oh, okay. Okay, I've got it.

MR. WIN: Before we get into the example in 116, Your Honor, let me just give you a little background on what an IP address -- how it's different from a Web site address.

Imagine you have a tall high-rise building with multiple floors on it, multiple tenants, people living in the building. And consider each Web site being each unit within the building or each floor. And, so, the information that

identifies the server, or in this case the server, is 150 West Main Street. That's the address that identifies the whole building which contains multiple floors. But if you want to identify a particular Web site or a particular floor or unit in the building, you want to say, "I want to go to Room 323 on the 14th Floor at 150 West Main Street." So, similar to that analogy, you can have a server with an IP address that hosts multiple Web sites. And, with that example, I'd like to go into slide 116 now.

At 116, the IP address of the server that hosts the Web site for this court is 199.107.20.38. Now, when I try to type that IP address into my Web browser it does not take me to the Eastern District of Virginia's Web site, because an IP address is not a Web site address.

Now, if you go to the next slide, at 117, now I type in what is the Web site address, www.vaed.uscourts.gov, and, sure enough, it takes me to the Eastern District of Virginia court's Web site, because that is a Web site address.

So that's the risk you have when you broaden the term "Web site address" beyond what it is.

THE COURT: Okay.

MR. WIN: Thank you, Your Honor.

THE COURT: I don't know why -- it's certainly unusual that the proponent of a patent would want to define its own term. Why should the proponent of the patent be

permitted to amend their patent by redefining a term that they used when the patent was granted?

MR. COLE: Well, we would dispute, Your Honor, that we're trying to redefine the term.

What's happening here is that many people are familiar with the Internet, and they are familiar with typing in what we call a URL. That's your www. -- whatever the address is. The jury is going to be familiar with that and they're going to associate that with a Web site address appropriately. That is a type of Web site address. Commonly, the people of the jury may not understand that there are other types of information that can identify a Web site, also. One of those types of information in certain circumstances is an IP address.

Now, I want to be clear about this point: Invincea's proposed construction does not say IP addresses are Web site addresses, but, in fact, IP addresses are Web site addresses in many cases. He showed you a particular example where typing an IP address into a Web browser led to an error, but in many, many circumstances typing an IP address into a Web browser will take you to the Web site, and in those circumstances the IP address qualifies as information identifying a Web site address. And it's not limited to IP addresses and URLs; there's other information that can be used to identify the Web site.

THE COURT: Well, it seems to me you're trying to broaden your term that you chose to use in your claim.

MR. COLE: I understand, Your Honor. The intrinsic record includes this notion that an IP address is a Web site address, and I'll ask you to take a look at --

THE COURT: Well, it could be, but the fact that an IP address could be a Web site address doesn't mean that a Web site address is an IP address. This is a term you chose to use in your patent, and you're the one that wants to redefine it.

MR. COLE: No, Your Honor, we do not want to redefine it, we want the jury to understand that it is not as narrow as is commonly used.

THE COURT: Well, then you should have used a different term in your claim. I'm not going to define that term.

MR. COLE: Okay.

MR. BUNSOW: I believe that concludes all the terms today, Your Honor.

THE COURT: I think it does.

We've got all these so-called undefinable terms, and we certainly don't have to deal with all those today, but presumably what we'll have is some sort of motion.

MR. CUMMINGS: Yes. It was the parties' understanding, Your Honor, that you didn't want to address

those today, that they would be addressed at another time, so --

THE COURT: Well, it was the Court's understanding that the parties didn't want to address these terms today.

MR. BUNSOW: Actually, we don't care if you ever address them, Your Honor.

THE COURT: I'm sure you don't.

No, I didn't intend to address them today, but the reason I didn't intend to address them is because the parties didn't ask us to. They have to be addressed at some point. I suppose you'll address them in a motion and say that the patent is indefinite because the points are undefinable.

That may not be a new issue for you. It is a new issue for me. I don't recall in a computer software case having terms disputed in that manner, but our research indicates you have a right to do that. But what it means is then that the Court has to look at the term and see if it can be defined, and if it can be then it's not indefinite.

Now, you have a bit of a dilemma on your side of the case. You can do what plaintiffs do and what they did in this case. They say, "Well, the term doesn't need defining." You can say, "The term can't be defined, but if I had to define it, I would define it as follows." Of course, if you do that it sort of weakens your argument that it can't be defined, but that leaves me with -- I guess the plaintiff is

going to say they don't need defining.

Again, as I said to you guys when you were trying to redefine one of the terms in your patent, it seems like to me what that's doing, in effect, is allowing a party to amend their own patent in the course of the litigation, which doesn't seem to be something that I ought to permit them to do. So that means, I suppose, that the plaintiff is going to say that the terms don't need to be defined, and the defendants are going to say that the terms can't be defined. And I have to look at them and see if they can be defined, but I can't rewrite the patent in order to -- I'm supposed to define it in such a way that the patent will be valid, but I'm not supposed to rewrite the patent in order to make it valid.

So there's a narrow line that the Court has to walk there. So I suppose that's what I'll have to do if you make the claim of indefiniteness based on these terms. Now, are you going to make that claim in some sort of pretrial motion or what?

MR. CUMMINGS: Well, Your Honor, we're certainly willing to take any suggestions on how you would prefer that we approach those.

Invincea briefed the invalidity and the indefiniteness of those terms. I think after your order came out indicating that Your Honor didn't want to address those

at this hearing Vir2us didn't provide their response to those, but if you would -- we believe that those issues are ripe and that the Court could address those once the briefing on them is complete, or if Your Honor would prefer to address these later with summary judgment. But it could very likely narrow issues for trial if these invalidity issues are addressed soon, rather than later at summary judgment or at trial.

THE COURT: Well, I mean, it's your defense, and I'm not going to limit you or direct you in how you should raise it, but, I mean, if the patents are indefinite, then that's the end of the case.

MR. CUMMINGS: That's right, Your Honor. That's why --

THE COURT: And, so, it seems to me that the parties would want to raise that issue before trial and not do all your trial preparation on all of the many issues involved in the case, if they would be disposed of on that basis.

MR. CUMMINGS: And because these indefinite issues are claim-construction-related, that's why Invincea raised them at this point. They also raised another indefiniteness question about our patent as well. That's why Invincea believed that they should be raised at claim construction.

So if Your Honor would welcome a summary judgment motion to get these invalidity issues addressed quickly, then

we'd certainly do that.

THE COURT: Well --

MR. BUNSOW: Your Honor, may I suggest that we meet and confer on that issue and propose an appropriate time for the Court to take those up? We agree the Court needs to take those up. It's just a matter of timing. We agree we don't want to wait until the eleventh hour to take those up. Sooner is better than later.

THE COURT: Well, I did think when I wrote that order and I saw the narrow path that I had to follow, which is one side not being able to redefine their own terms, as they would prefer in hindsight to write them -- we can always do a better job in hindsight -- and then the defendants saying, well, they can't be defined, that leaves the Court with a narrow path, as I said.

So I didn't want to take them up today because I figured that I would learn a lot more about the patents today to help me deal with this other issue, but I do think I would like to take them up certainly in advance of trial.

When is the trial?

MR. CUMMINGS: June 1st, I believe it is.

THE COURT: June 1st? Yes. Well, the sooner we can take it up the better, as far as my schedule is concerned, because I've got a very time-consuming case that's going to start at the beginning of May, and so I'm going to be very

pressed for time in the month of May.

MR. CUMMINGS: Okay. We'll meet and confer and come up with a procedure that we'll then propose for the Court.

MR. BUNSOW: I'm sure we can get it done well in advance of your trial that's coming up in May, Your Honor.

THE COURT: Right, because it's a criminal case, and it probably will not be resolved without a trial. So any motions that we can take up, I'm just telling you that we better take them up before we get to May, because I'm not going to have much time in May. That's the way it is.

MR. BUNSOW: Understood, Your Honor. Thank you.

THE COURT: All right. Is there anything else we need to deal with today?

MR. BUNSOW: Nothing from the plaintiff, Your Honor.

MR. CUMMINGS: Just one suggestion, Your Honor.

It's Invincea's position that the parties really could use a settlement conference. Given the amount of damages that are likely to be at issue in these cases, summary judgment and trial doesn't make any sense, and we think that if the parties could sit down and talk -- we've offered mediation, we've offered a settlement conference. Invincea believes that that would be very useful and save the Court and the parties a lot of trouble.

THE COURT: Well, we do have, in effect, free mediation through the Magistrate Judges. On the other hand,

the Magistrate Judges can't go on and on and on like a mediator could.

So our rule is that if a party requests mediation we'll try to make a Magistrate Judge available for that, but you have to realize that the Magistrate Judge, unlike a mediator, can't just devote unlimited time to it.

MR. NOONA: Your Honor, Stephen Noona. If it please the Court, we've discussed possibly going to a private mediator, in particular, retired Judge Stillman, and the parties have just been exchanging dates. I think, given a little bit of time, they'll be able to work that out.

THE COURT: Yes. Well, that's fine, if you want to do it. As I say, the advantage to using a private mediator is that, you know, he'll go 12 hours a day -- he or she -- for however many days it takes. If you do it before a Magistrate Judge, he's got so many hours and then he has to pull the cord. And I'm sure you could get more time with him later, but you might lose your momentum.

MR. CUMMINGS: Well, Invincea agreed to use Judge Stillman in November, but we haven't been able to reach agreement on a date for the mediation. So if that's not going to work, Invincea would be happy with a settlement conference with the Magistrate. We just think sitting down would be helpful, and we've not been able to get Vir2us to agree to sit down with us.

THE COURT: Well, I think it's always worthwhile to attempt one way or the other, so why don't you let me know within a calendar week -- that would be by next Friday -- whether you've been able to agree on a date with Judge Stillman. If you haven't been able to do that, I will ask one of the Magistrate Judges.

THE CLERK: Judge Leonard is assigned to this case.

THE COURT: Yes, right. Well, Judge Leonard is assigned to the case. Our rule is that we don't use a judge who has made any ruling in the case or potentially will make any ruling in the case. But, unlike a lot of the judges, I handle all of my pretrial motions, including discovery disputes, so there's no reason you can't use Judge Leonard. I don't think he's made any rulings, has he?

All right. So let me hear from you by noon on Friday, next Friday, as to whether you've been able to schedule a mediation with retired Judge Stillman. If you haven't, then I'll set up what we call a settlement conference with Judge Leonard.

MR. CUMMINGS: Thank you, Your Honor.

MR. BUNSOW: Thank you, Your Honor.

THE COURT: All right.

(The hearing adjourned at 3:38 p.m.)

CERTIFICATION

I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

/s

Heidi L. Jeffreys

February 16, 2016

Date